Airborne Express #5220165230 June 23, 2000

Mr. Chuck Schwer Vermont Agency of Natural Resources Department of Environmental Conservation Site Management Section 103 South Main Street/West Office Waterbury, VT 05671-0404

Re:

Site Excavation and

Preliminary Assessment Report

Ryder Transportation Services Facility Location Code #1178

520 Shunpike Road Williston, Vermont DEC SMS Site #99-2717

Dear Mr. Schwer:

Geologic Services Corporation (GSC), on behalf of Ryder Transportation Services (Ryder), has prepared the enclosed Site Excavation and Preliminary Assessment Report detailing the activities completed at the above-referenced Ryder Facility pursuant to the Site Investigation Expressway Notification Form prepared and submitted to the Department of Environmental Conservation in February, 2000. The Ryder representative overseeing the activities associated with this submittal is Ms. Carrie Anne Buck; correspondence regarding this work should be directed to her attention at the following address:

Ryder Environmental Services 160 Lawrenceville-Pennington Road Suite 16, PMB 119 Lawrenceville, New Jersey 08648

As noted in the enclosed report, petroleum-impacted soil at this site does not appear to be adversely affecting groundwater conditions, and as impacted soil at this site is anticipated to continue to biodegrade and attenuate over time through naturally-occurring processes, no further actions are viewed to be warranted with respect to Case #99-2717.

Please do not hesitate to contact either of the undersigned at (978) 568-8740 if you require any additional information.

Sincerely,

**Geologic Services Corporation** 

Brian D. Moore

Project Manager

Operations Manager

Carrie Anne Buck, Ryder Transportation, Lawrenceville, NJ Cc:

Ref#990208.05

JUL 03 YUU

Phase (check one)	Type (check one)						
☐ Initial Site Investigation ☐ Corrective Action Feasibility ☐ Investigation ☐ Corrective Action Plan ☐ Corrective Action Summary Report ☐ Operations & Monitoring Report	☐ Work Scope  ☐ Technical Report ☐ PCF Reimbursement Request ☐ General Correspondence						

### SITE EXCAVATION AND PRELIMINARY ASSESSMENT REPORT

#### RYDER TRANSPORTATION SERVICES FACILITY LOCATION CODE #1178 520 SHUNPIKE ROAD WILLISTON, VERMONT 05403 SMS Case #99-2717

#### Prepared For:

Ryder Transportation Services 140 Lawrenceville-Pennington Road Suite 16, PMB 119 Lawrenceville, New Jersey 08648 (609) 631 - 8584 Contact: Carrie Anne Buck

#### Prepared By:

Geologic Services Corporation 15 Bonazzoli Avenue Hudson, MA 01749 (978) 568-8740 Contact: Brian D. Moore

June, 2000

GSC File: 990208

#### QUALITY ASSURANCE/QUALITY CONTROL

The following personnel have reviewed this report for accuracy, content, and quality of presentation.

Donald L. Pomeroy <
Operations Manager

Date 6/23/00

Brian D. Moore Project Manager

Date

Nathan A. Stevens

Environmental Scientist

<u>6/23/00</u>
Date

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1.0

INTRODUCTION

Geologic Services Corporation (GSC) was retained by Ryder Transportation Services (Ryder) to document the closure and/or replacement of two fuel dispensers, four satellite dispensers, and the associated underground satellite dispenser piping at the Ryder Facility (Location Code #1178) situated at 520 Shunpike Road in Williston, Vermont. As part of these activities, GSC performed field headspace screening and collected in-situ soil samples from the piping and dispenser excavation areas in order to assess potential petroleum impact at the subject property associated with the removed piping and equipment. After receipt of the Underground Storage Tank (UST) Permanent Closure Form, the Vermont Site Management Section (SMS) issued Case #99-2717 to this site.

#### 1.1 Objective

The objective of this report is to document environmental conditions in the vicinity of the removed piping and dispensers in accordance with the Vermont Agency of Natural Resources (VT ANR) Department of Environmental Conservation (DEC) Guidelines and Policies.

#### 2.0 SITE REPRESENTATION

The following subsections provide a brief description of the subject site and surrounding area.

#### 2.1 Property Description

The subject property is a commercial vehicle leasing facility comprising approximately 2.5 acres of land situated at 520 Shunpike Road (formerly identified as 114 Shunpike Road) in a commercial/industrial area of Williston, Vermont. The subject property is bound to the south by Shunpike Road, to the west by P & P Septic Service (a commercial property), to the east by Engineers Drive, and to the north by a construction company. The majority of the subject property is covered by asphalt or reinforced concrete.

The on-site facility building is constructed on a poured concrete slab foundation, and currently houses offices and three service bays. One 10,000-gallon and two 12,000-gallon diesel fuel underground storage tanks (USTs) are presently located approximately 200 feet southeast of the facility building. The 10,000-gallon UST was converted from gasoline to diesel fuel storage as part of this project. The former gasoline dispenser and two associated satellite dispensers were removed during the course of these

Page 2

activities, while the diesel satellite dispensers were replaced during these activities. No monitoring wells were found to exist on the subject property. The facility is presently connected to the municipal water supply and serviced by an on-site sanitary septic system. Please refer to Figures 1 and 2 (Appendix A) for a depiction of the subject property and surrounding area.

#### 2.2 Potential Receptors

Potential receptors in the vicinity of the subject site include subsurface utility conduits situated beneath both the subject property and adjacent Shunpike Road. The closest surface water body to the subject site is Muddy Brook situated approximately 600 feet west of the subject site. No private water supplies or wellhead protection areas are known to exist within one mile of the subject site. The closest school or institution is the Muddy Brook School located approximately 4200 feet east of the subject site. A review of the VT ANR Geographic Information System (GIS) System Map for the vicinity of the subject site did not indicate the presence of Public Drinking Water Source, Groundwater Source, or Surface Water Source Protection Areas within 1000 feet of the subject property. According to the Town of Williston Department of Public Works, no private or public potable water supply wells are known to be located within 1000 feet of the subject property.

#### SUMMARY OF ASSESSMENT ACTIVITIES 3.0

On November 30, 1999, the gasoline fuel dispenser, the four satellite dispensers, and the associated subsurface piping were removed from the subject site. Excavation activities were performed by Interface Services/CDM (ISCDM) utilizing a Bobcat Model 510C backhoe. Photographic documentation of these activities is provided as Appendix B.

#### **Excavation Assessment** 3.1

On November 30, 1999, GSC was present on-site to collect soil samples from the UST piping and dispenser excavation areas and perform field headspace screening activities in accordance with VT ANR DEC's Guidelines and Policies. The excavation in the area of the dispensers and satellites was approximately 50 feet in length, twelve feet in width, and three to four feet in depth. Excavated material consisted of fine to medium sand with some pea-sized gravel ("peastone").

Based on the results of field screening activities and the visual/olfactory indications of petroleum impact, GSC provided verbal notification to the VT ANR DEC in a telephone conversation held between Brian Moore of GSC and Ted Unkles of the DEC at approximately 10:55 AM on November 30, 1999. Following DEC's approval, GSC directed the excavation and segregation of petroleum-impacted soil in

accordance with the procedures set forth in the DEC Guidelines for Petroleum Contaminated Soil and Debris. GSC subsequently directed the segregation and stockpiling of approximately ten cubic yards of petroleum impacted soil during these activities. The extent of the area excavated during these activities, along with the locations of soil samples collected for laboratory analyses, is depicted on Figure 3 (Appendix A).

#### 3.1.1 Soil Sample Collection and Analysis

On November 30, 1999 a total of 60 in-situ soil samples were collected from the dispenser/piping excavation area and screened in the field for the presence of volatile organic compounds (VOCs) using a photoionization detector (PID) equipped with a 10.2 electron volt lamp calibrated to respond to VOCs in parts per million by volume (ppmv) as benzene. Field headspace screening results ranged from non-detect (ND) to 344 ppmv in a soil sample collected from beneath the former gasoline dispenser at a depth of approximately three feet below grade. As previously noted, VT ANR DEC was verbally notified of these conditions on November 30, 1999. Refer to Table I (Appendix C) for a summary of PID field screening results.

Following the source removal activities previously described, one soil sample was collected from the bottom of each of the four trench excavations, and from beneath each of the former dispensers at depths ranging from two to three feet below grade for laboratory submittal. These six (6) samples were submitted to Southern Petroleum Laboratories (SPL) of Scott, Louisiana for the analysis of benzene, toluene, ethylbenzene, xylenes (BTEX), and methyl tert-butyl ether (MTBE) via EPA Method 8021, and total petroleum hydrocarbon (TPH) concentrations via EPA Method 8015. The analytical results of these soil samples are summarized in Table II (Appendix C), while the locations from which they were collected are depicted on Figure 3 (Appendix A). Complete analytical data from these samples are included in Appendix D.

#### Soil Management 3.1.2

As previously noted, GSC directed the segregation and stockpiling of approximately ten cubic yards of petroleum impacted soil during the activities described above. On January 25, 2000, VT ANR approved the Off-Site Soil Recycling Form that had been submitted to facilitate the off-site transportation and recycling of the stockpiled soil. On February 24, 2000 approximately 13.41 tons of soil (as weighed by the receiving facility) were transported to the Environmental Soil Management (ESMI) facility located in Loudon, New Hampshire for recycling by Engineers Construction (ECI) of South Burlington, Vermont. The VT ANR-approved Soil Recycling Form has been included along with affidavit of recycling in Appendix E.

#### 3.2 Preliminary Site Assessment

As noted in the Expressway Notification correspondence dated February 14, 2000, the soil sample collected from the bottom of the southern dispenser excavation (D-2/BOT) following the excavation activities previously described exhibited concentrations of 2300 milligrams per kilogram (mg/kg) gasoline-range TPH (TPH-GRO) and 20,000 mg/kg diesel-range TPH (TPH-DRO), values that exceed the Closure Guidance Value presented in the DEC Guidelines for Petroleum Contaminated Soil and Debris (refer to Table II – Appendix C).

This correspondence also detailed the preliminary assessment activities that would be implemented at this site to address these conditions, namely the advancement of four soil borings, the field screening of collected soil samples utilizing a PID, and the collection of additional soil and groundwater samples for laboratory analysis. The following subsections describe the activities undertaken in accordance with the scope of work outlined in the Expressway Notification correspondence.

#### 3.2.1 Drilling Activities

On February 24, 2000, GSC personnel supervised the advancement of four soil borings (SB-1 through SB-4) around the dispenser island area at the subject property. Aquifer Drilling and Testing (ADT) of Albany, New York performed the drilling activities utilizing a truck-mounted drill rig equipped with hollow stem augers. Each borehole was advanced to a depth of approximately 15 feet below grade, with the first four (4) feet being manually advanced. Split-spoon soil samples were subsequently collected on a continuous basis in each boring to characterize the materials encountered and collect soil samples for field screening and potential laboratory submittal.

Materials encountered in each boring consisted of sand and gravel fill to depths of four feet below grade underlain by silt with varying amounts (trace to some) of fine sand and clay. No auger or split spoon refusals were encountered during these drilling activities. As groundwater was encountered at a depth of approximately eight to ten feet below grade in the soil borings, temporary monitoring points were installed within the borehole annulus in order to collect groundwater samples. Each temporary wellpoint was purged of three (3) volumes of standing formation groundwater prior to sampling, with the exception of SB-4, which did not yield a sufficient amount of formation groundwater to allow for the collection of a representative groundwater sample. A complete description of materials encountered is included along with PID field headspace screening responses on the boring logs contained in Appendix F.

#### 3.2.2 Sample Collection and Analysis

A total of 30 soil samples collected during the drilling activities were screened in the field using a calibrated PID. None of the samples yielded a PID response above the instrument detection limit of 0.1 ppmv (i.e., non-detect or ND). The soil sample collected from each borehole at a depth immediately above the observed water table (from approximately six to eight feet below grade) was containerized for laboratory analysis. A total of four (4) soil samples collected from these borings were submitted to SPL for the analysis of BTEX and MTBE via EPA Method 8020 and TPH via EPA Method 8015. The analytical results from these four additional soil samples are included in Table II (Appendix C), while complete analytical data are included in Appendix D.

As noted previously, groundwater samples were obtained from temporary monitoring points set in borings SB-1, SB-2, and SB-3. Purge water was discharged to the paved surface areas on the subject site. These samples were collected using dedicated polyethylene bailers, and were submitted to SPL for the analysis of BTEX and MTBE via EPA Method 8020. The analytical results from these three groundwater samples are presented in Table III (Appendix C), while complete analytical data are included in Appendix D.

#### 4.0 CURRENT SITE CONDITIONS

The following sections summarize the results of soil and groundwater samples collected during both the November, 1999 UST subsurface piping closure activities and the subsequent preliminary assessment work completed following submittal of the Expressway Notification form.

#### 4.1 Soil

As noted in Table I, field headspace screening results were utilized to segregate and stockpile approximately ten cubic yards of petroleum-impacted soil from the dispenser area excavation. The soil that remained in-place following the excavation activities, as well as the soil encountered in the four soil borings (refer to Appendix F), did not yield PID responses in excess of 10 ppmv VOCs.

As previously noted, the analytical results of the ten collected soil samples are summarized in Table II along with the VT ANR DEC Groundwater Enforcement Standards (VGES) and the Risk-Based Corrective Action (RBCA) Soil Standards published by the United States Environmental Protection Agency (US EPA – Region III). As noted in Table II, only one of the ten soil samples collected during these activities (the sample collected from six to eight feet below grade in SB-1) exhibited concentrations of targeted analytes in excess of the VGES values (0.130 mg/kg benzene and 0.083 mg/kg MTBE). In addition, two of the ten soil samples collected during these activities (the D-2/BOT soil sample and the

sample collected from six to eight feet below grade in SB-1) exhibited concentrations of TPH-GRO and/or TPH-DRO that exceeded the Closure Guidance Value presented in the DEC Guidelines for Petroleum Contaminated Soil and Debris.

#### 4,2 Groundwater

As previously noted, the analytical results of the groundwater samples collected from borings SB-1, SB-2, and SB-3 are summarized in Table III along with the applicable VT ANR DEC Primary Groundwater Quality Standards and Preventive Action Levels presented in the ANR DEC Groundwater Protection Rule and Strategy. As noted in Table III, none of targeted petroleum analytes were detected in the three collected groundwater samples.

#### 5.0 SUMMARY AND CONCLUSIONS

The following is a summary of the activities recently completed at the Ryder Transportation Services Facility situated at 520 Shunpike Road in Williston, Vermont, and the conclusions based thereon:

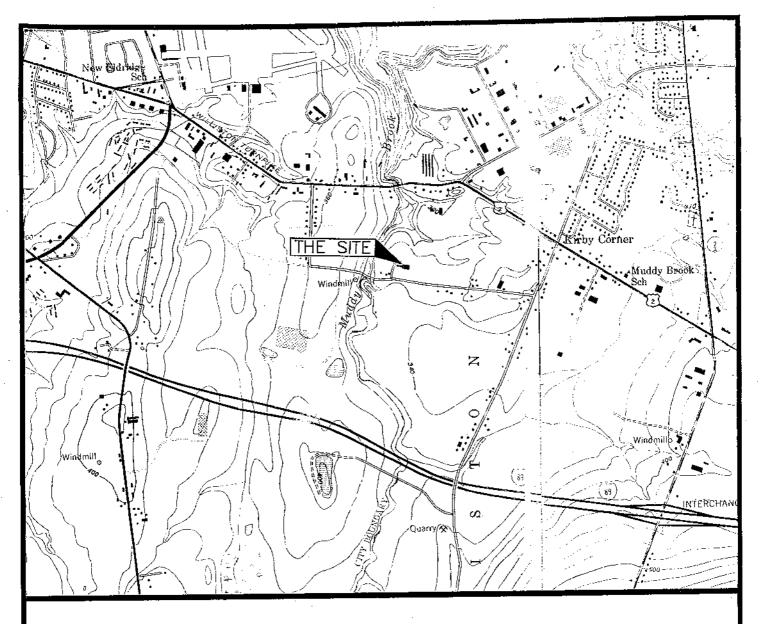
- Field headspace screening of soil samples collected during these activities yielded PID results
  of up to 344 ppmv in one soil sample collected from below the former gasoline dispenser.
  The VT ANR DEC was verbally notified of these conditions on November 30, 1999, and
  subsequently issued Case #99-2717 to this site.
- Based on PID field screening results and visual/olfactory indications of petroleum impact, approximately ten cubic yards of petroleum-impacted soil was segregated and stockpiled in accordance with VT ANR DEC Guidelines and Policies. This soil (13.41 tons as weighed by the receiving facility) was subsequently transported to the ESMI facility in Loudon, New Hampshire for recycling on February 24, 2000.
- One of the six post-excavation soil samples collected and submitted for laboratory analysis
  exhibited detectable concentrations of TPH-GRO and TPH-DRO that exceeded the 1000
  mg/kg Closure Guidance Value presented in the DEC Guidelines for Petroleum
  Contaminated Soil and Debris.
- On February 24, 2000 GSC supervised the advancement of soil borings SB-1 through SB-4 in the vicinity of the dispenser island area to obtain additional soil and groundwater samples for laboratory analysis. All four borings were advanced to a depth of 15 feet below grade, and groundwater samples were subsequently obtained from borings SB-1, SB-2, and SB-3.
- Materials encountered during boring activities consisted of sand and gravel fill to a depth of approximately four feet below grade underlain by silt with varying amounts of clay and/or fine sand. Bedrock was not encountered during soil boring advancement.

• None of the groundwater samples collected from three of the four advanced soil borings exhibited a detectable concentrations of BTEX constituents or MTBE.

The subsurface investigation performed to assess the petroleum impact identified at this site during the November, 1999 subsurface piping excavation activities indicates that two target petroleum analytes (benzene and MTBE) exist at concentrations that exceed the VGES Soil Standards. In addition, two of the ten soil samples collected at this site during the activities described herein exhibited concentrations of TPH that exceed the Closure Guidance Values published by VT ANR DEC. However, based on the fact that the apparent 'source' of the adsorbed petroleum impact is viewed to have been removed during the excavation activities performed herein, and the fact that none of the target petroleum analytes were detected in the three collected groundwater samples, residual adsorbed petroleum impact at this site is not viewed to be adversely affecting site groundwater conditions

As the PID responses and visual/olfactory observations indicate that the majority of the accessible petroleum-impacted soil has already been removed from the former source area, and subsurface materials do not appear to be conducive to rapid transport of the targeted analytes to site groundwater, the absence of potentially sensitive receptors in the vicinity of the subject property indicate that residual hydrocarbons adsorbed to site soil do not pose a significant risk to potential receptors at this time. This finding is supported by the fact that none of the detected target analytes exhibited concentrations approaching or exceeding the RBCA Soil Standards published by US EPA Region III, and the fact that the VGES Soil Standards appear to be arbitrarily derived from the Primary Groundwater Quality Standard and do not apply to the soil-to-groundwater transport potential associated with the analytes detected in soil at this particular site. Therefore, as the presence of benzene and MTBE in site soil do not appear to be adversely affecting groundwater conditions at this site, and as it is anticipated that residual TPH-impacted soil at this site will continue to biodegrade and attenuate over time through naturally-occurring processes, no further actions are viewed to be warranted with respect to the petroleum-impacted soil identified and associated with VT ANR DEC Case #99-2717.

APPENDIX A



4 923 720 N 648 320 E UTM COORDINATES:

ZONE 18

15" 44° 27' LATITUDE: 08' 05" 73° LONGITUDE:

4000



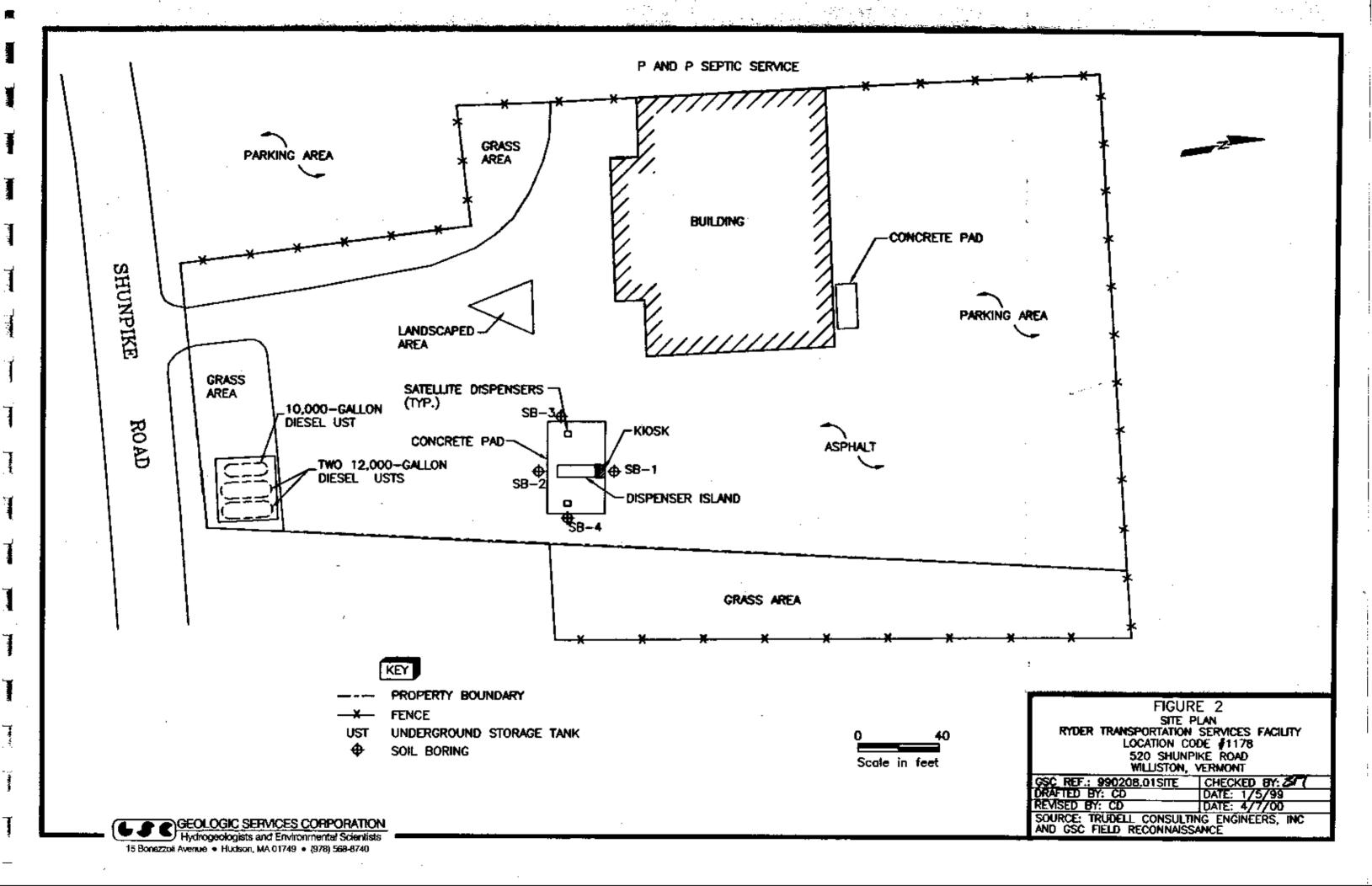
QUADRANGLE LOCATION

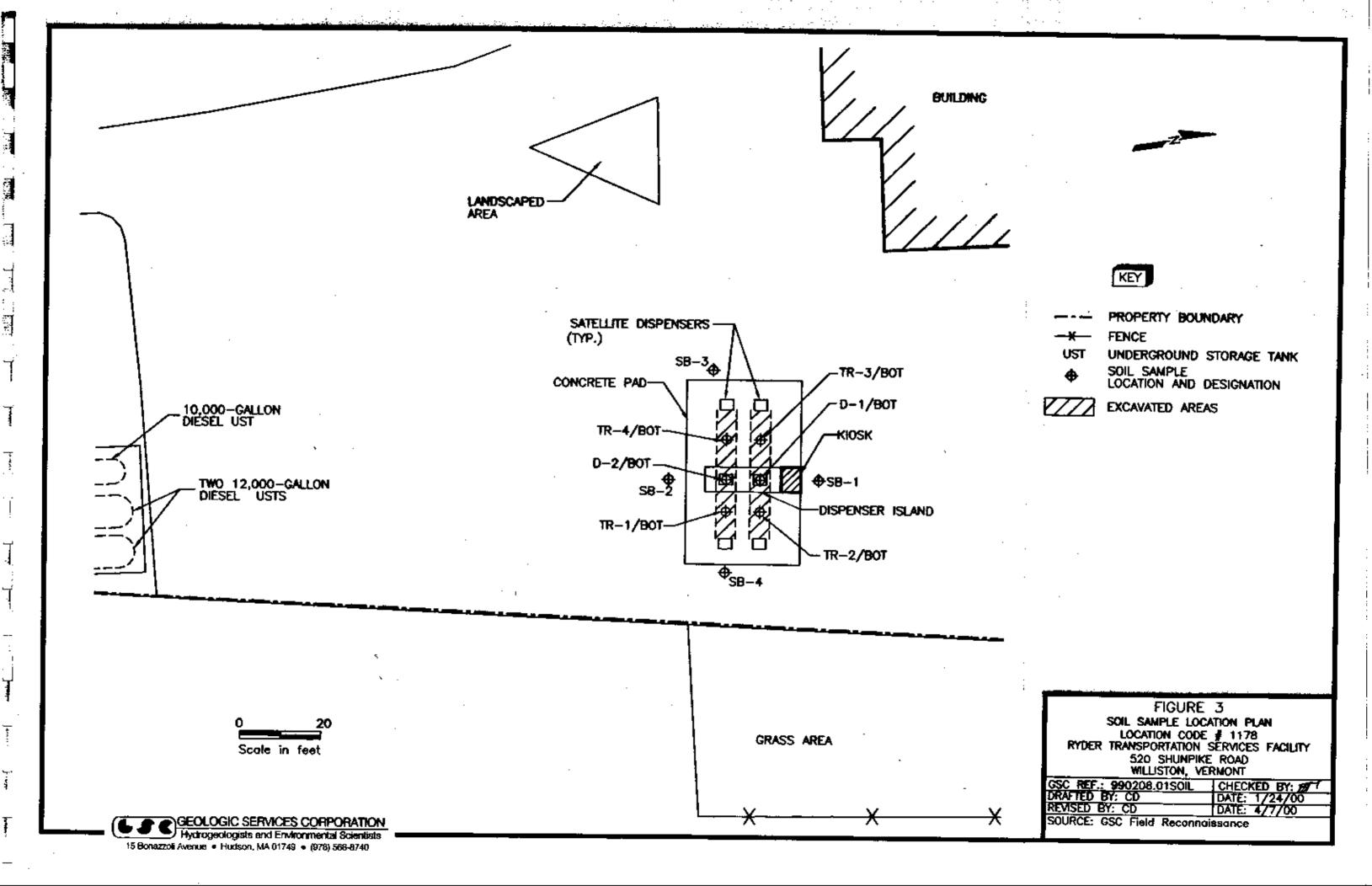
Scale in feet

FIGURE 1
LOCUS PLAN
RYDER TRANSPORTATION SERVICES FACILITY
LOCATION CODE # 1178
520 SHUNPIKE ROAD
WILLISTON, VERMONT

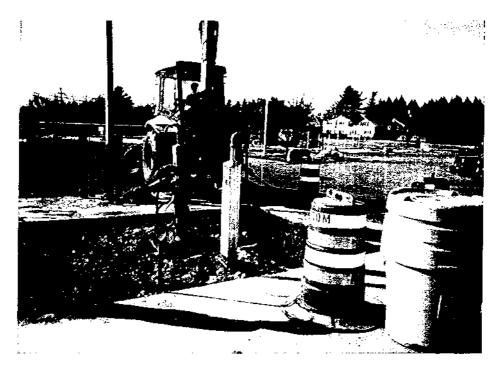
GSC REF.: 990208.01LOCUS CHECKED BY:
DRAFTED BY: CD DATE: 1/21/00 REVISED BY: RJD DATE: 1/26/00 SOURCE: USGS TOPOGRAPHIC ESSEX JUCTION QUADRANGLE 7.5 MINUTE SERIES







APPENDIX B



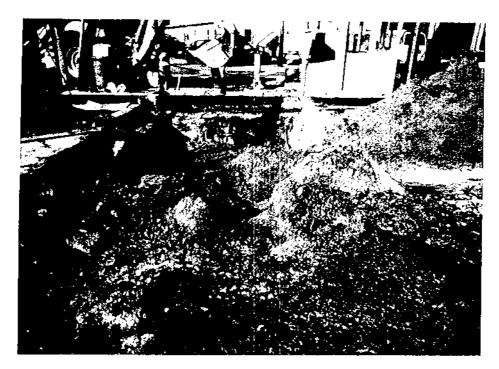
VIEW OF SATELLITE DISPENSER BEING REMOVED FROM EXCAVATION



VIEW OF SATELLITE PIPING BEING REMOVED FROM EXCAVATION

PHOTOGRAPHIC DOCUMENTATION — 11/30/99 RYDER TRANSPORTATION SERVICES FACILITY LOCATION CODE #1178 520 SHUNPIKE ROAD WILLISTON, VERMONT

GSC REF.: 990208.01PHOTO CHECKED BY: DC
DRAFTED BY: CD DATE: 1/21/00
REVISED BY: RJD DATE: 1/26/00
SOURCE: GSC FIELD RECONNAISSANCE



VIEW OF EASTERN SIDE OF EXCAVATION



VIEW OF WESTERN SIDE OF EXCAVATION

PHOTOGRAPHIC DOCUMENTATION — 11/30/99 RYDER TRANSPORTATION SERVICES FACILITY LOCATION CODE #1178 520 SHUNPIKE ROAD WILLISTON, VERMONT

GSC REF.: 990208.02PHOTO CHECKED BY: DC DRAFTED BY: CD DATE: 1/21/00 REVISED BY: RJD DATE: 1/26/00 SOURCE: GSC FIELD RECONNAISSANCE

APPENDIX C

#### TABLE I

## Summary of Soil Sample Headspace Screening Results Ryder Transportation Services Facility Location Code #1178 520 Shunpike Road Williston, Vermont

Soil Sample	Sample Location	Depth	PID Response	Sail	Laboratory Sample	
ID		(ft)	(ppmv)	Disposition	Identification	
1	Gasoline Fuel	0.5	5,0	re-used	-	
	Piping Excavation	ļ			<del> </del>	
2	Gasoline Fuel	1-2	25.1	stockpiled	-	
	Piping Excavation					
3	Gasoline Fuel	1-2	18.1	stockpiled	-	
	Piping Excavation	<b>_</b>			<u> </u>	
4	Gasoline Fuel	1-2	1.1	re-used	-	
	Piping Excavation	1				
5	Gasoline Fuel	1-2	0.4	re-used	-	
	Piping Excavation	ļ	<b> </b>			
6	Gasoline Fuel	1-2	0.4	re-used	-	
	Piping Excavation	<del>                                     </del>			ļ	
7	Gasoline Fuel	1-2	0.1	re-used	-	
	Piping Excavation				<u> </u>	
8	Gasoline Fuel	2-3	ИD	rc-used	-	
	Piping Excavation	ļ				
9	Gasoline Fuel	1-2	3.1	re-used	-	
	Piping Excavation	<b></b>				
10	Gasoline Fuel	2-3	1.4	re-used	-	
	Piping Excavation	<del>                                     </del>			<del>                                      </del>	
11	Gasoline Fuel	2-3	0.1	re-used	-	
<del></del>	Piping Excavation	<del> </del>				
12	Gasoline Fuel	1-2	29.1	stockpiled	-	
	Piping Excavation	<del>                                     </del>	ļ. <u> </u>		1	
13	Gasoline Fuel	2-3	0.1	re-used	-	
	Piping Excavation	<u> </u>		<del></del>	1	
14	Gasoline Fuel	2-3	ND	re-used	-	
	Piping Excavation				<del> </del> ,	
15	Gasoline Fuel	0.5	ND	re-used	-	
<del></del>	Piping Excavation		2.		TO 0 000	
16	Gasoline Fuel	2-3	0.6	in-situ	TR-2/BOT	
· · · ·	Piping Excavation  Gasoline Fuel	<del> </del>				
17	•	1-2	ND	re-used	-	
	Piping Excavation	1-2	\		···-	
18	Gasoline Fuel	1-2	ND	r¢-used	_	
19	Piping Excavation  Gasoline Fuel		ND		<u> </u>	
19		2-3	ND	re-used	-	
30	Piping Excavation  Gasoline Fuel	2-3	0.8	es usad		
20		2-3	0.8	re-used	-	
21	Piping Excavation Gasoline Fuel	2-3	0.1	in-situ	TR-3/BOT	
21		2-3	0.1	in-situ	1K-3/BO1	
22	Piping Excavation	2-3	6.1	no usad	1	
22	Gasoline Fuel	2-3	6.1	re-used	_	
23	Piping Excavation  Gasoline Fuel	2-3	18.1	stockpiled	-	
23		2-3	10.1	stockhilea	•	
	Piping Excavation	1 27	104	stockpiled	<del> </del> -	
24	Gasoline Fuel	2-3	104	Stockbiled		
35	Piping Excavation			re-used		
25		Gasotine Fuel 1-2		re-useu	'	
76	Piping Excavation Gasoline Fuel	2-3	3.7	re-used	<del> </del>	
26		2-3	3.1	16-0560		
27	Piping Excavation Gasoline Fuel	2-3	ND	re-used	<del> </del>	
41	Pining Excavation	3	, I	10 4304		

Piping Excavation

#### TABLE I

#### Summary of Soil Sample Headspace Screening Results Ryder Transportation Services Facility

Location Code #1178 520 Shunpike Road Williston, Vermont November 30, 1999

Soil Sample ID	Sample Location	Depth (ft)	PID Response (ppmv)	Soil Dispositian	Laboratory Sampl Identification	
28	Diesel Fuel	0.5	25	stockpiled		
20	Piping Excavation	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	-	otoonphaa		
29	Diesel Fuel	1-2	38	stockpiled	1 -	
	Piping Excavation	1	'		ŀ	
30	Diesel Fuel	1-2	26	stockpiled	_	
	Piping Excavation			•	1	
31	Diesel Fuel	1-2	1.0	re-used	-	
	Piping Excavation	1				
32	Diesel Fuel	2-3	8,1	re-used	-	
1	Piping Excavation					
33	Diesel Fuel	1-2	0.7	re-used	-	
	Piping Excavation					
34	Diesel Fuel	1-2	0.4	re-used		
	Piping Excavation					
35	Diesel Fuel	1-2	СИ	re-used	-	
	Piping Excavation	l				
36	Diesel Fuel	0.5	ИD	re-used	-	
	Piping Excavation		ļ <u></u>			
37	Diesel Fuel	2-3	4,5	in-situ	TR-1/BOT	
	Piping Excavation					
38	Diesel Fuel	1	0.4	re-used	-	
	Piping Excavation					
39	Diesel Fuel	1-2	0.2	re-used	-	
	Piping Excavation					
40	Diesel Fuel	2-3	DИ	re-used	-	
	Piping Excavation	ļ <u>.</u>		_		
41	Diesel Fuel	1-2	21.1	stockpiled	-	
	Piping Excavation					
42	Diesel Fuel	0.5	100	stockpiled	-	
	Piping Excavation	<u> </u>				
43	Diesel Fuel	0-1	18.4	stockpiled		
1	Piping Excavation					
44	Diesel Fuel	0-1	26.4	stockpiled		
	Piping Excavation					
45	Diesel Fuel	2-3	3,6	re-used	-	
	Piping Excavation	<del> </del>			<del> </del>	
46	Diesel Fuel	1-2	22.3	stockpiled	-	
· · <del>-  </del>	Piping Excavation	<del> </del>	<u> </u>		1	
47	Diesel Fuel	1-2	0.1	re-used	1	
	Piping Excavation		ND -	in-situ		
48	Diesel Fuel	2-3	ND	m-siu	1	
	Piping Excavation	1	).TS	in-situ	TR-4/BOT	
49	Diesel Fuel	2-3	ND	(11-21111	IN-4/BOT	
	Piping Excavation		10	stockpiled		
50	Gasoline Dispenser	0-1	19	Stockpited	•	
	Area Excavation	1-2	68	stockpiled		
51	Gasoline Dispenser	1-2	į <sup>00</sup>	atockpited		
	Area Excavation	<del> </del>	344	stockpiled		
52	Gasoline Dispenser	2-3	344	stockbuea		
	Area Excavation	1 22	30.3	stockpiled		
53	Gasoline Dispenser	2-3	30.3	stock)men	1	
	Area Excavation	3	1.8	in-situ	D-1/BOT	
54	Gasoline Dispenser Area Excavation	,	1.0	64-2410	.5-11201	

#### TABLE I

#### Summary of Soil Sample Headspace Screening Results Ryder Transportation Services Facility

Location Code #1178 520 Shunpike Road Williston, Vermont November 30, 1999

Soil Sample ID	Sample Location	Depth (ft)	PID Response (ppmv)	Soil Disposition	Laboratory Sample Identification
55	Diesel Dispenser Area Excavation	1-2	34.2	stockpiled	-
56	Diesel Dispenser Area Excavation	1-2	32.1	stockpiled	-
57	Diesel Dispenser Area Excavation	1-2	28.2	stockpiled	-
58	Diesel Dispenser Area Excavation	2-3	58	stockpiled	-
59	Diesel Dispenser Area Excavation	2-3	34	stockpiled	-
60	Diesel Dispenser Area Excavation	3-3.5	2.1	in-situ	D-2/BOT

Notes:

UST - underground storage tank

Depth - depth below grade from which soil sample was collected in feet (ft)

PID - photoionization detector equipped with a 10.2 electron volt lamp calibrated to read volatile organic

compounds (VOCs) in parts per million by volume (ppmv) as benzene

ND - not detected at or above PID detection limit (0.1 ppmv)

- - not applicable

#### TABLE II

#### Summary of Soil Sample Analytical Results Ryder Transportation Services Facility Location Code #1178 520 Shunpike Road

Williston, Vermont

November 30, 1999 through February 24, 2000

#### VT AGENCY OF NATURAL RESOURCES DEC SOIL STANDARDS

Soil Standard	Benzene (nig/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	TPH (nig/kg)
Vermont Groundwater Enforcement Standards	0.005	1.0	0.7	10,0	0.04	1000
EPA Region III RBCA - Industrial Direct Exposure	200	410,000	200,000	4,100,000	*	*

LABORATORY ANALYTICAL RESULTS

Sample ID	Date	Depth	Benzene	Toluene	Ethyl-	Total	MTBE	T	PH
· ·	l i	(feet)	(mg/kg)	(mg/kg)	benzene	Xylenes	(mg/kg)	GRO	DRO
	1 1	_	, , ,		(mg/kg)	(mg/kg)	<u></u>	(mg/kg)	(nig/kg)
D-1/BOT	11/30/99	3	<0,001	<0.001	<0.001	< 0.001	<0.008	<0.i	16.0
D-2/BOT	11/30/99	3	<0.2	0.30	0.24	2.4	<1.6	2300	20,000
TR-1/BOT	11/30/99	2	<0.001	<0.001	< 0.001	< 0.001	<0.008	6.6	80.0
TR-2/BOT	11/30/99	2	< 0.001	<0.001	< 0.001	<0,001	<0.008	0.20	12.0
TR-3/BOT	11/30/99	2	<0.001	< 0.001	< 0.001	<0.001	<0.008	<0.1	18.0
TR-4/BOT	11/30/99	2	001	<0.001	<0.001	< 0.001	<0.008	<0.1	4.0
SB-1	2/24/00	6-8	0.130	0.120	0.0011	<0.001	0.083	5.4	8300
SB-2	2/24/00	6-8	< 0.001	< 0.001	< 0.001	< 0.001	<0.008	<0,1	47
SB-3	2/24/00	6-8	<0.001	< 0.001	<0.001	< 0.001	<0.008	<0.1	23
SB-4	2/24/00	6-8	< 0.001	< 0.001	< 0.001	<0.001	<0.008	<0.1	8.4

Notes:

mg/kg - milligrams per kilogram (parts per million)

MTBE - methyl tert-butyl ether TPH - total petroleum hydrocarbons

DRO - diesel range organics

GRO - gasoline range organics

<0.001 - not detected (method detection limit included)

TPH Standard presented under the Vermont Groundwater Enforcement Standard derived from the Closure Requirements set fort

in the DEC Guidelines for Petroleum Contaminated Soil and Debris shading indicates that reported concentration exceeds one or more of the standards presented above

<sup>\* -</sup> no standard has been developed for this compound in this category

#### TABLE III

# Summary of Groundwater Sample Analytical Results Ryder Transportation Services Facility Location Code #1178 520 Shunpike Road Williston, Vermont February 24, 2000

#### VT AGENCY OF NATURAL RESOURCES DEC GROUNDWATER STANDARDS

Groundwater Quality Standard	Benzene (ug/l)	Toluene (ug/l)	Ethyl- benzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)
Primary Groundwater Quality Standard	5.0	1000	700	10,000	40
Preventive Action Level	0.5	500	350	5000	20

#### LABORATORY ANALYTICAL RESULTS

Sample ID	Date	Benzene (ug/l)	Toluene (ug/l)	Ethyl- benzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)
SB-I/WS	2/24/00	<1.0	<1.0	<1.0	<1.0	<8.0
SB-2/WS	2/24/00	<1.0	<1.0	<1.0	<1.0	<8.0
SB-3/WS	2/24/00	<1.0	<1.0	<1.0	<1.0	<8.0

Notes: ug/l - milligrams per liter (parts per billion)

MTBE - methyl tert-butyl ether

<1.0 - not detected (method detection limit included)

APPENDIX D



#### JAN 1 4 2000 CORRECTED REPORT

LAFAYETTE AREA LAB 500 AMBASSADOR CAFFERY PKWY, SCOTT, LOUISIANA ZIP 70583-8544 PHONE: (318) 237-4775

Reported: 01/10/00

#### LABORATORY REPORT

SPL WORKORDER NUMBER: 9912399

Submitted to:

BRIAN MOORE

GEOLOGIC SERVICES CORPORATION

15. BONAZZOLI AVENUE

HUDSON

MA 01749

Prepared For: RYDER TRUCK RENTAL

Measurement Basis: This analysis was performed in accordance with EPA guidelines for analysis and quality control. Results are reported on a Wet Weight Basis unless otherwise noted and relate only to items tested.

#### Report Comments:

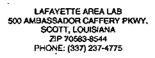
Per David Cella, the enclosed report was amended to include the MTBE results for the samples originally analyzed by Method 8020 or 8260. All other analytical data remains the same. If you have any questios, please do not hesitate to call me at 318-237-4775.

Approved By:

ANNIE REEDY

Project Manager

Note: This report may not be reproduced, except in full, without written permission from SPL.





Date: Monday, January 10, 2000

#### \*\*\*\*\*SUMMARY REPORT\*\*\*\*\*

Company: RYDER TRUCK RENTAL

WILLISTON, VT

Project No: 990208

Project: #1178, 521 SHUNPIKE ROAD

Site:	WILL	ISTON, VT		Project: #1178, 521 SHUNPIKE ROAD					
Workorder	Matrix	Client ID	Collected ·	Compound.	Result	Det Limit	Method		
9912399-06	SOIL	TR-3/BOT	11/30/99	Methyl t-Butyl Ether	ND	8 Pug/kg	Method 8020A ***		
				Benzene	ND		Method 8021B ***		
	· · · · · · · · · · · · · · · · · · ·	Market in the	e Personal and Angline	Ethyl Benzene	₩ ND	1.0ug/kg	Method 8021B ***		
				Toluene	ND	1.0ug/kg	Method 8021B ***		
		•	•	Total Xylene	ND	l.Oug/kg	Method 8021B ***		
		•		Gasoline Range Organics	ND	0.1mg/kg	Method Modified 8015B*** for		
				Petroleum Hydrocarbons-Diesel	18	3.3mg/kg	Method Modified 8015B*** for		

•Ref: Methods for chemical Analysis of Water and Wastes, 1983, EPA.

\*\*Ref: Standard Methods for Examination of Water and Wastewater, 18th ed.



LAFAYETTE AREA LAB 500 AMBASSADOR CAFFERY PKWY. SCOTT, LOUISIANA ZIP 70583-8544 PHONE: (337) 237-4775

Date: Monday, January 10, 2000

#### \*\*\*\*\*SUMMARY REPORT\*\*\*\*\*

Company: RYDER TRUCK RENTAL

WILLISTON, VT

Project No: 990208

Project: #1178, 521 SHUNPIKE ROAD

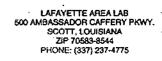
Site:	WILL	ISTON, VT		Project: #1178,521 SHUNPIKE ROAD				
Workorder	Matrix	Client ID	Collected	Compound	Result	Det Limit	Method	
9912399-07	SOIL	VIC/SSWB	12/1/99	Tetrachloroethene	ND .	Sug/Kg	Method 8260B ***	
				Toluene	ND	Sug/Kg	Method 8260B ***	
	4	en er i state fra 1944 kan ser i state.		trans-1,2-Dichloroethene	ND	Sug/Kg	Method 8260B ***	
.**	- (		 A STATE OF THE PARTY	trans-1,3-Dichloropropene	ND	Sug/Kg	Method 8260B ***	
			-	Trichloroethene .	ND	Sug/Kg	Method 8260B ***	
				Trichlorofluoromethane	ND	Sug/Kg	Method 8260B ***	
				Vinyl Acetate	ND	Sug/Kg	Method 8260B ***	
				Vinyl chloride	ND	pug/Kg	Method 8260B ***	
				Xylenes (total)	ND	pug/Kg	Method 8260B ***	
				Gasoline Range Organics	ND	p.1mg/kg	Method Modified 8015B*** for	
				Petroleum Hydrocarbons-Diesel	3.5	3.3mg/kg	Method Modified 8015B*** for	
							1	

ND - Not Detected.

Notes:

\*Ref: Methods for chemical Analysis of Water and Wastes, 1983, EPA.

\*\*Ref: Standard Methods for Examination of Water and Wastewater, 18th ed.





Date: Monday, January 10, 2000

#### \*\*\*\*\*SUMMARY REPORT\*\*\*\*

Company: RYDER TRUCK RENTAL

ite: WILLISTON, VT

Project No: 990208

Project: #1178, 521 SHUNPIKE ROAD

Site:	WILL	1210M, VI		riojace.		71 ()11()1(112	<u></u>
Workorder	Matrix	Client ID	Collected	Compound	Result	Det Limit	Method
9912399-08	SOIL	VICÆSWB	12/1/99	Tetrachloroethene	ND .	δug/Kg	Method 8260B ***
**		-		Toluene	Ν̈́D	Sug/Kg	Method 8260B ***
				trans-1,2-Dichloroethene	ND:	Sug/Kg	Method 8260B ***
		· 新克奇·安克·克尔克·格勒尔尔	ार्थक व्यक्तिक देश की शक्ति की जन	trans-1,3-Dichloropropene	ND	Sug/Kg	Method 8260B ***
	- •			Trichloroethene	ND	5ug/Kg	Method 8260B ***
		1.4		Trichlorofluoromethane	ЙĎ	Sug/Kg	Method 8260B ***
		•	-	Vinyl Acetate	ND	5ug/Kg	Method 8260B ***
	-			Vinyt chloride	ND	5ug/Kg	Method 8260B ***
				Xylenes (total)	ND	5ug/Kg	Method 8260B ***
				Gasoline Range Organics	ND	0. lmg/kg	Method Modified 8015B*** for
				Petroleum Hydrocarhons-Diesel	ND	3.3mg/kg	Method Modified 8015B*** for

ND - Not Detected.

Notes:

\*Ref: Methods for chemical Analysis of Water and Wastes, 1983, EPA.

\*\*Ref: Standard Methods for Examination of Water and Wastewater, 18th ed.



100



Date: Monday, January 10, 2000

#### \*\*\*\*\*SUMMARY REPORT\*\*\*\*\*

Company: RYDER TRUCK RENTAL

WILLISTON, VT

Project No: 990208

Project: #1178, 521 SHUNPIKE ROAD

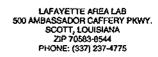
Workorder	Matrix	Client ID	• •	Collected	Compound	Result	Det Limit	Method
9912399-09	- SOIL	VIC/WSWB		12/1/99	Tetrachloroethene	ND	Sug/Kg	Method 8260B ***
	•		-		Toluene	ND	Sug/Kg	Method 8260B ***
•					trans-1,2-Dichloroethene	ND	5ug/Kg	Method 8260B ***
		+ + + + + + + + + + + + + + + + + + +		Name (Professor)	trans-1,3-Dichloropropene	ND	5ug/Kg	Method 8260B ***
•				•	Trichloroethene	ND	5ug/Kg	Method 8260B ***
•					Trichlorofluoromethane	ND	5ug/Kg	Method 8260B ***
					Vinyl Acetate	ND	Sug/Kg	Method 8260B ***
					Vinyl chloride	ND	Sug/Kg	Method 8260B ***
					Xylenes (total)	ND	5ug/Kg	Method 8260B ***
					Gasoline Range Organics	ND	0.ling/kg	Method Modified 8015B*** for
					Petroleum Hydrocarbons-Diesel	170	66mg/kg	Method Modified 8015B*** for

ND - Not Detected.

Notes:

\*Ref: Methods for chemical Analysis of Water and Wastes, 1983, EPA.

\*\*Ref: Standard Methods for Examination of Water and Wastewater, 18th ed.



Method Modified 8015B\*\*\* for



Date: Monday, January 10, 2000

#### \*\*\*\*\*SUMMARY REPORT\*\*\*\*\*

Company: RYDER TRUCK RENTAL

site: WILLISTON, VT

Project No: 990208

400

66nig/kg

Project: #1178, 521 SHUNPIKE ROAD

Site:	WILL.	1510N, VI					
Workorder	Matrix	Client ID	Collected	Compound	Result	Det Limit	Method
9912399-10	SOIL	VIC/NSWB ·	12/1/99	Tetrachloroethene	ND .	δug/Kg	Method 8260B ***
	•	,		Toluene	ND	5ug/Kg	Method 8260B ***
				trans-1,2-Dichloroethene	ND	Sug/Kg	Method 8260B ***
	. v.	The state of the second	10 to	trans-1,3-Dichloropropene			Method 8260B ***
				Trichloroethene	ND	pug/Kg	Method 8260B ***
				Trichlorofluoromethane	ND	5ug/Kg	Method 8260B ***
				Vinyl Acetate	ND	oug/Kg	Method 8260B ***
				Vinyl chloride	ND	ōug/Kg	Method 8260B ***
				Xylenes (total)	ND	5ug/Kg	Method 8260B ***
				Gasoline Range Organics	ND	0.1mg/kg	Method Modified 8015B*** for

Petroleum Hydrocarbons-Diesel





Date: Monday, January 10, 2000

#### \*\*\*\*\*SUMMARY REPORT\*\*\*\*

Company: RYDER TRUCK RENTAL

Site: WILLISTON, VT

Project No: 990208

Project: #1178, 521 SHUNPIKE ROAD

Workorder	Matrix	Client ID		Collected	Compound	Result	Det Limit	Method	18, 4 A
9912399-11	SOIL .	DISCH/VIC		12/1/99	Tetrachloroethene	ND.	Sug/Kg	Method 8260B ***	
,	10015				Toluene	ND	Sug/Kg	Method 8260B ***	
٠.					trans-1,2-Dichloroethene	ND	Sug/Kg	Method 8260B ***	
	also services	e d	100	n er i skøpt i	trans-1,3-Dichloropropene	ND	Sug/Kg	Method 8260B ***	para in h
					Trichloroethene	ND	Sug/Kg	Method 8260B ***	
		•		-	Trichlorofluoromethane	ND	5ug/Kg	Method 8260B ***	
				•	Vinyl Acetate	ND	5ug/Kg	Method 8260B ***	
				-	Vinyl chloride	ND	5ug/Kg	Method 8260B ***	
					Xylenes (total)	ND	5ug/Kg	Method 8260B ***	
					Gasoline Range Organics	ND	0.1mg/kg	Method Modified 801	5B*** for
					Petroleum Hydrocarbons-Diesel	360	33mg/kg	Method Modified 801	5B*** for
	_								
9912399-12	SOIL	STOCKPILE		12/1/99	Gasoline Range Organics	890	50mg/kg	Method Modified 801	
					Petroleum Hydrocarbons-Diesel	5300	66mg/kg	Method Modified 801	5B*** for

ND - Not Detected.

Notes:

\*Ref: Methods for chemical Analysis of Water and Wastes, 1983, EPA.

\*\*Ref: Standard Methods for Examination of Water and Wastewater, 18th ed.





RYDER TRUCK RENTAL 19 MINK RUN COURT

NORTH BRUNSWICK, NJ 8902

ATTN: CARRIE BUCK

DATE: 01/10/00

PROJECT: #1178, 521 SHUNPIKE ROAD

SITE: WILLISTON, VT

SAMPLED BY: GEOLOGIC SERIVICES

SAMPLE ID: D-2/BOT

PROJECT NO: 990208

MATRIX: SOIL

DATE SAMPLED: 11/30/99 14:00:00

. DATE RECEIVED: 12/02/99

ANALYTICAL DATA

PARAMETER RES

RESULTS D

DETECTION UNITS

LIMIT

ND

1600

ug/kg

Methyl t-Butyl Ether Method 8020A \*\*\*

Analyzed by: RB

Date: 12/08/99 16:33:00

ND - Not detected.

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA

\*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.

\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

COMMENTS: Surrogate failure due to matrix interference.

+D = SURROGATE DILUTED OUT.

QUALITY ASSURANCE: This analysis was performed in accordance with EPA guidelines for analysis and quality control. Results are reported on a Wet Weight Basis unless otherwise noted and relate only to items tested.





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RYDER TRUCK RENTAL 19 MINK RUN COURT

NORTH BRUNSWICK, NJ 8902

ATTN: CARRIE BUCK

DATE: 01/10/00

PROJECT: #1178, 521 SHUNPIKE ROAD SITE: WILLISTON, VT

SAMPLED BY: GEOLOGIC SERIVICES

SAMPLE ID: TR-4/BOT

PROJECT NO: 990208

MATRIX: SOIL

DATE SAMPLED: 11/30/99 14:20:00

DATE RECEIVED: 12/02/99

ANALYTICAL DATA									
PARAMETER	RESULTS	DETECTION LIMIT	UNITS						
Gasoline Range Organics	ND	0.1 P	mg/kg						
Surrogate	% Recovery								
4-Bromofluorobenzene	95								
1,4-Difluorobenzene Method Modified 8015B*** for Gasc Analyzed by: RB Date: 12/09/99	98 Oline								
BENZENE	ND	1.0 P	ug/kg						
TOLUENE	ND	1.0 P	ug/kg						
ETHYLBENZENE	ИD	1.0 P	ug/kg						
TOTAL XYLENE	ND	1.0 P	ug/kg						
TOTAL VOLATILE AROMATIC HYDROCARE	ND ND		ug/kg						
Surrogate	% Recovery								
1,4-Difluorobenzene	98								
4-Bromofluorobenzene Method 8021B *** Analyzed by: RB Date: 12/09/99	101								
Methyl t-Butyl Ether	ND	8	ug/kg						
Method 8020A ***									
Analyzed by: RB									
Date: 12/08/99 16:33:00			<u>-</u> .						

ND - Not detected.

(P) - Practical Quantitation Limit

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA \*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed. \*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: This analysis was performed in accordance with EPA guidelines for analysis and quality control. Results are reported on a Wet Weight Basis unless otherwise noted and relate only to items tested.





RYDER TRUCK RENTAL 19 MINK RUN COURT NORTH BRUNSWICK, NJ 8902

DATE: 01/10/00

PROJECT: #1178, 521 SHUNPIKE ROAD

SITE: WILLISTON, VT

ATTN: CARRIE BUCK

SAMPLED BY: GEOLOGIC SERIVICES

SAMPLE ID: TR-1/BOT

PROJECT NO: 990208

MATRIX: SOIL SOTO LA SURSEMENT SOLL S

LIMIT

DATE SAMPLED: 11/30/99 14:30:00

DATE RECEIVED: 12/02/99

ANALYTICAL DATA

PARAMETER

RESULTS DETECTION

ND

UNITS

ug/kg

Methyl t-Butyl Ether

Method 8020A \*\*\* Analyzed by: RB

Date: 12/08/99 16:33:00

ND - Not detected.

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA

\*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.

\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

COMMENTS: Surrogate failure due to matrix interference.

QUALITY ASSURANCE: This analysis was performed in accordance with EPA guidelines for analysis and quality control. Results are reported on a Wet Weight Basis unless otherwise noted and relate only to items tested.





RYDER TRUCK RENTAL 19 MINK RUN COURT

NORTH BRUNSWICK, NJ 8902

ATTN: CARRIE BUCK

DATE: 01/10/00

PROJECT: #1178, 521 SHUNPIKE ROAD

SITE: WILLISTON, VT

SAMPLED BY: GEOLOGIC SERIVICES

SAMPLE ID: TR-3/BOT

**PROJECT NO:** 990208

- MATRIX: SOIL

DATE SAMPLED: 11/30/99 13:30:00

DATE RECEIVED: 12/02/99

ANALYTICA	L DATA		
PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Gasoline Range Organics	ND	0.1 P	mg/kg
Surrogate 4-Bromofluorobenzene 1,4-Difluorobenzene Method Modified 8015B*** for Gasolin Analyzed by: RB Date: 12/09/99	% Recovery 97 101 ne		
BENZENE TOLUENE ETHYLBENZENE TOTAL XYLENE TOTAL VOLATILE AROMATIC HYDROCARBONS	ND ND ND ND	1.0 P 1.0 P 1.0 P 1.0 P	ug/kg ug/kg ug/kg ug/kg ug/kg
Surrogate 1,4-Difluorobenzene 4-Bromofluorobenzene Method 8021B *** Analyzed by: RB Date: 12/09/99	% Recovery 92 91		
Methyl t-Butyl Ether Method 8020A *** Analyzed by: RB Date: 12/08/99 16:33:00	ND	8	ug/kg

ND - Not detected.

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA

\*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.

\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: This analysis was performed in accordance with EPA guidelines for analysis and quality control. Results are reported on a Wet Weight Basis unless otherwise noted and relate only to items tested.

<sup>(</sup>P) - Practical Quantitation Limit





RYDER TRUCK RENTAL

SAMPLE ID: VIC/SSWB

PARAMETER	ANALYTICAL DATA RESULTS			nits
o-Xylene. Methyl t-butyl ether		ND 5 ND 5	•	ug/Kg ug/Kg
SURROGATES	AMOUNT	%	LOWER	UPPER
	SPIKED	RECOVERY	LIMIT	LIMIT
1,2-Dichloroethane-d4	100 ug/Kg	93	80.00	120.0
Toluene-d8	100 ug/Kg	93	81.00	117.0
4-Bromofluorobenzene	100 ug/Kg	88	74.00	121.0

ANALYZED BY: YTS DATE/TIME: 12/07/99 12:07:00

METHOD: 8260B Soil, Volatile Organics

NOTES: \* - Practical Quantitation Limit ND - Not Detected

NA - Not Analyzed

COMMENTS: Method 8260 Associated Blank: X341B01 File ID: X341S07





. RYDER TRUCK RENTAL

SAMPLE ID: VIC/ESWB

PARAMETER o-Xylene Methyl t-butyl ether	ANALYTICAL DATA RESULTS	(continued) PQL* ND ND	5 5.		<b>NITS</b> Kg
SURROGATES	AMOUNT SPIKED	% RECOVERY	÷.	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4 Toluene-d8 4-Bromofluorobenzene	100 ug/Kg 100 ug/Kg 100 ug/Kg	91 92 88		80.00 81.00 74.00	120.0 117.0 121.0

ANALYZED BY: YTS DATE/TIME: 12/07/99 15:45:00

METHOD: 8260B Soil, Volatile Organics

NOTES: \* - Practical Quantitation Limit ND - Not Detected

NA - Not Analyzed

COMMENTS: Method 8260 Associated Blank: X341B01 File ID: X341S88





RYDER TRUCK RENTAL

SAMPLE ID: VIC/WSWB

PARAMETER	ANALYTICAL DATA RESULTS	(cont	inued <b>PQL</b> *	) <sub>(1)</sub> •	י ער איז	NITS
o-Xylene Methyl t-butyl ether	··.	ND ND	•.	5 5	ug/ ug/	
SURROGATES	AMOUNT SPIKED	% REC	OVERY	· · · · · · · · · · · · · · · · · · ·	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4 Toluene-d8 4-Bromofluorobenzene	. 100 ug/Kg 100 ug/Kg 100 ug/Kg		81 96 87		80.00 81.00 74.00	120.0 117.0 121.0

ANALYZED BY: YTS DATE/TIME: 12/07/99 16:10:00

METHOD: 8260B Soil, Volatile Organics

NOTES: \* - Practical Quantitation Limit ND - Not Detected

NA - Not Analyzed

COMMENTS: Method 8260 Associated Blank:X341B01 File ID: X341S89 +D = SURROGATE DILUTED OUT.





RYDER TRUCK RENTAL

SAMPLE ID: VIC/NSWB

PARAMETER	ANALYTICAL DATA RESULTS		UN	ITS
o-Xylene Methyl t-butyl ether		ND 5	ug/K ug/K	~
SURROGATES	AMOUNT	%	LOWER	UPPER
	SPIKED	RECOVERY	LIMIT	LIMIT
1,2-Dichloroethane-d4	100 ug/Kg	105	80.00	120.0
Toluene-d8	100 ug/Kg	95	81.00	117.0
4-Bromofluorobenzene	100 ug/Kg	85	74.00	121.0

ANALYZED BY: YTS DATE/TIME: 12/07/99 14:04:00

METHOD: 8260B Soil, Volatile Organics

NOTES: \* - Practical Quantitation Limit ND - Not Detected

NA - Not Analyzed

COMMENTS: Method 8260 Associated Blank: X341B01 File ID: X341S10

+D = SURROGATE DILUTED OUT.





RYDER TRUCK RENTAL

SAMPLE ID: DISCH/VIC

PARAMETER o-Xylene	ANAL	YTICAL DATA RESULTS	•	5	<b>ບ</b> ug/	<b>NITS</b> Kg
Methyl t-butyl ether SURROGATES		AMOUNT SPIKED	ND % RECOVERY	5	ug/ LOWER LIMIT	
1,2-Dichloroethane-d4 Toluene-d8 4-Bromofluorobenzene		100 ug/Kg 100 ug/Kg 100 ug/Kg	98 94 84		80.00 81.00 74.00	120.0 117.0 121.0

ANALYZED BY: YTS DATE/TIME: 12/07/99 14:27:00

METHOD: 8260B Soil, Volatile Organics

NOTES: \* - Practical Quantitation Limit ND - Not Detected

NA - Not Analyzed

COMMENTS: Method 8260 Associated Blank: X341B01 File ID: X341S11

+D = SURROGATE DILUTED OUT.

(ZA)							· · · · · · · · · · · · · · · · · · ·		Market State of the state of th			
				文 了 3	8880 Interch Houston, Te (713) 660-09 Fax: (713) 6	xas 77054 // Sc 01 (31		(6:		9684 St. Rose, Louis (504) 487-550	Buite B Siana 70087 B	Analysis Request and Chain of Custody Record Temp: Store: (Lab Use Only)
	Consultant Proje		<b>,</b>		lect Physical Addr 521 Shu	ess Mg, he R	41)) U	Vi Duane Coco	Project City &	and State		
	Field Sample No./ Identification	Date and Time	Grab	Сощр	Sample Container (No. & Size)	Sample Type (Liquid, Soil Sludge, Etc.)	Preser- vative	TEST	ANALYSIS F	EQUESTED METHOD		REMARKS
	Post/vic	12/1/99	X		2 800	Saul		VCCs, RCRAS Etylene Glyc		8260, 6010/70 8000, 680/	00, DRO	
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	Sampler	s: (Signature)			Relinquished by:			Date: [2/1/99	Received by:		Date: /	2/1 K4 Intact
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s.		T'S PHONE T'S FAX #:	#:_	<u> </u>	•			⊡ 5 Days Standard		ANO BEACH PULL INFORMATION		3N, 1A
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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, YEXAS 77054 (713) 660-0901

## Case Narrative for: **Southern Petroleum Laboratories**

## Certificate of Analysis Number:

#### 99120188

Report To:

Southern Petroleum Laboratories

Vicki Fredericks

500 Ambassador Caffery Parkway

**Project Name:** 

#1178

Ryder Truck Rental

Site Address:

PO Number:

Scott

Louisiana

70583-8544

ph: (318) 237-4775

fax: (318) 237-7080

Site:

State:

Louisiana

State Cert. No.:

N/A

Date Reported:

Any Data flags or quality control exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Brown, Electa

12/17/99

Date



#### HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TEXAS 77054 (713) 660-0901

Client Sample ID VIC/SSWB Collected: 12/1/99 11:20:00 SPL Sample ID: 99120188-01

Site: Ryder Truck Rental

Analyses/Method	Result		Rep.Limit		Dil. Factor QUAL	Date Analyzed Analyst	Seq.#
SEMIVOLATILE HYDROCARBONS				MCL	SW8015B	Units: mg/Kg	
Ethylene Glycol	ND	-	20		· 1	12/16/99 12:31 DR	133033
Surr: Triethylene Glycol	. 75	%	50-150		11	12/16/99 12:31 DR	133033

		991216A-133033	
Dun ID/SAA	I TO MARIE	441715A-1.53H33	

trait intoch it.	,,,,,,		
Prep Method	Prep Date	·	Prep Initials
SW3550A	12/08/1999 14:16		J_L



#### HOUSTON LABORATORY 8880 INTERCHANGE DRIVE . HOUSTON, TEXAS 77054 (713) 660-0901

Client Sample ID VIC/WSWB Collected: 12/1/99 11:28:00 SPL Sample ID: 99120188-03

Site: Ryder Truck Rental

Analyses/Method		Result		Rep.Limit		Dil. Factor QUAL	Date Analyzed Analyst	Seq.#
SEMIVOLATILE HYDROCA	RBONS	-		<del> '</del>	MCL	SW8015B	Units: mg/Kg	
Ethylene Glycol	· · ·	ND		20		1	12/16/99 13:19 DR	133044
Surr: Triethylene Glycol	•	59	. %	50-150		1	12/16/99 13:19 DR	133044

Run ID/Seq #: VARC\_991216A-133044

Prep Method	Prep Date	Prep Initials
SW3550A	12/08/1999 14:16	 J_L

ND/U - Not Detected at the Reporting Limit

 $\ensuremath{\boldsymbol{B}}$  - Analyte detected in the associated Method Blank

\* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQt.

>MCL - Result Over Maximum Contamination Limit(MCL)

D - Surrogate Recovery Unreportable due to Dilution



#### HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TEXAS 77054 (713) 660-0901

Client Sample ID DISCH/VIC			Colle	ected:	12/1/99 2:45:00	SPL Sample II	): 99120	0188-05
	· ·	· ·	Site:	Ryc	der Truck Rental			
Analyses/Method		Result	Rep.Limit		Dil. Factor QUAL	Date Analyzed	Analyst	Seq.#
SEMIVOLATILE HYDROCARBONS				MCL	SW8015B	Units: mg	g/Kg	
Ethylene Glycol		ND	20	·	1	12/16/99 13:59	DR	133046
Surr: Triethylene Gl	ycol.	67 .	% 50-150		1	12/16/99 13:59	DR	133046
Run ID/Seq #: V		-133046		<u> </u>				
Prep Method	Prep Date		Prep Initials		•			
SW3550A	12/08/1999	14:16	J_L	,				



#### HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TEXAS 77054 (713) 660-0901

#### **Quality Control Report**

#### Southern Petroleum Laboratories

#1178

Analysis: Method:

Semivolatile Hydrocarbons

SW8015B

Samples in Analytical Batch:

WorkOrder:

99120188

Lab Batch ID:

2037

Method Blank

RunID: Analysis Date: VARC\_991216A-133032 12/16/1999 11:53

Units: Analyst: mg/Kg ÐR

Lab Sample ID 99120188-01A

Client Sample ID VIC/SSWB

99120188-02A

VIC/ESWB

99120188-03A 99120188-04A **VIC/WSWB** VIC/NSWB

Analyte Ethylene Glycol Surr: Triethylene Glycol

Result Rep Limit ND 20 0-0 72.4

99120188-05A

DISCHAVIC

Laboratory Control Sample (LCS)

RunID:

VARC\_991216A-133039

Units:

mg/Kg

Analysis Date:

12/15/1999 14:52

Analyst:

Spike Analyte Added 400

Result Percent Recovery

DR

Lower Limit

Upper Limit

Ethylene Glycol

116 460

150

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:

99120188-03

400

RuniD:

VARC\_991216A-133040

Units:

mg/Kg

400

Analysis Date:

12/15/1999 15:14

Analyst: DR

Analyte

Ethylene Glycol

MS M\$ Result Sample Result Spike Added

ND

MS % Recovery Spike

96.5

390.

MSD MSD Result Added

MSD % Recovery

380

93.9

 $2.75^{2}$ 

High: RPD RPD Low Limit Limit Limit

30

50 150

Qualifiers:

ND/U - Not Detected at the Reporting Limit

1 - Recovery Outside Advisable QC Limits

B - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution



94120188

SPL LABORATORIES, INC. 500 AMBASSADOR CAFFERY PKWY. SCOTT, LOUISIANA 70583-8544 PHONE: (318) 237-4775

## INTEROFFICE SAMPLE TRANSFER CHAIN OF CUSTODY

ORIGINATING LAB: <u>LAFAYETTE</u> RI		inton,	Vichio	DATE_	12/7/5
ATTENTION:	•	RESULTS TO: WRITTEN	FAX (318) 2	237-7080	<u> </u>
REPORT RESULTS BY:				NEEDED: 12	13/99
CLIENT NAME: #1100	•	T NO.:		ston VI	
PROJECT NAME: #1178	PROJE	CT LOCATION:			· · · · · · · · · · · · · · · · · · ·
HEADING FOR ANALYSIS	1. and +	INVOICE TO:		P.O.#	
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ADDRESS: 190 Num	R Kun Count	<u> </u>			
ATTN: Carrie B	uck, NJO	102			
SAMPLE NO. SAMPLI IDENTIFICATION DATE TI		NO. TYPE JAR JAR	SAMPLE MATRIX	ANALYSES REQUIRED	QUOTE PRICE
ac/sswb ph/99	1120 9912399	7-07C	Roll	Etherlene	L50
VICESUB "	1124	08C	<u> </u>		
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		(F	3	Houston, Texa (713) 660-090 Fax: (713) 660	1 (318	it, Louisiana 3) 237-4775 : (318) 237-7	(616	(616) 947-7455	(504) 487-5503	I temp.	(Lab Use Only)
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Field	Date			Sample	Sample Type	Preser-		ANALYSIS REC	QUESTED /		REMARKS
Sample No./ Identification	and Time	Grab	Comp	(No. & Size)	(Liquid, Soil Sludge, Etc.)	vative	TEST		METHOD		
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SPL BATCH QUALITY CONTROL REPORT \*\* Method 8021B \*\*\*

LAFAYETTE AREA LAB 500 AMBASSADOR CAFFERY PKWY. SCOTT, LOUISIANA ZIP 70583-8544 PHONE: (337) 237-4775

Matrix: Units:

Soil ug/kg

Batch Id: HPAA991208163301

#### CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Result <1>	Spike Recovery	QC Limits(**) (Mandatory)  * Recovery Range
Benzene	ND	50	53	106	70 - 130
Toluene	ND	50	50	100	70 - 130
Ethyl Benzene	ND	50	49	98.0	70 - 130
o-Xylene	· ND	50	52	104	70 - 130
m and p Xylene	ND	100	100	100	70 - 130

#### MATRIX SPIKES

S P I K E C O M P O U N D S	Sample Results	Spike Added	Matrix	Spike	Matrix Duplic		MS/MSD Relative %		imits(***) (Advisory)
			Result	Recovery			Difference	1	Begarrana Bango
	<2>	<3>	<1>	<4>>	<1>	<5>		Max	Recovery Range
BENZENÉ	ND	50	38	75.6	37	73.6	2.68	20	70 - <b>1</b> 30
TOLUENE	ND	50	31	62.0 «	29	58.0 «	6.67	20	70 - 130
ETHYL BENZENE	ND	50	22	44.0 «	21	42.0 «	4.65	20	70 - 130
O-XYLENE	МĎ	50	24	48.0 «	23	46.0 «	4.26	20	70 - 130
M AND P XYLENE	ИÐ	100	48	48.0 «	45	45.0 «	6.45	20	70 - 130

Analyst: RB

Sequence Date: 12/08/99

SPL ID of sample spiked: 9912399-11A

Sample File ID: AL08325.TX0

Method Blank File ID:

Blank Spike File ID: AL08303.TX0

Matrix Spike File ID: AL08332.TX0

Matrix Spike Duplicate File ID: AL08333.TX0

\* = Values Outside QC Range. « = Data outside Method Specification limits.

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery = [( <1> - <2> ) / <3> ] x 100

LCS % Recovery = (<1> / <3> ) x 100

Relative Percent Difference = |(<4> - <5>)| / [(<4> + <5>) x 0.5] x 100

(\*\*) = Source:

(\*\*\*) = Source: 8020 Table 3

SAMPLES IN BATCH(SPL ID):

9912399-01A 9912399-02A 9912399-03A 9912399-04A

9912399-05A 9912399-06A

NOTE: THE SOIL SAMPLE CHOSEN FOR SPIKING CAUSED AN ABSORPTIVE EFFECT ON THE SPIKE ADDED.



\* SPL BATCH QUALITY CONTROL REPORT \*\*

Method Modified 8015B\*\*\* for Gasoline

LAFAYETTE AREA LAB 500 AMBASSADOR CAFFERY PKWY. SCOTT, LOUISIANA ZIP 70583-8544 PHONE: (337) 237-4775

Matrix: Units: Soil

mg/kg

Batch Id: HPAA991208163304

#### LABORATORY CONTROL SAMPLE

SPIKE	Method Blank Result <2>	Spike Added <3>	Blank Result <1>	Spike Recovery	QC Limits(**) (Mandatory) & Recovery Range
Gasoline Range Organ	. DMD	5.0	5.4	108	70 - 130

#### MATRIX SPIKES

SPIKE	Sample Results	Spike Added	Matrix	Spike	Matrix Duoli		MS/MSD Relative %		Limits(***) (Advisory)
	<2>	<3>	Result <1>	Recovery	Result	Recovery	Difference	RPD Max.	Recovery Range
GASOLINE RANGE ORGAN	ИП	5.0	4.3	86.0	4.3	86.0	0	20	20 - 130

Analyst: RB

Sequence Date: 12/08/99

SPL ID of sample spiked: 9912385-12A

Sample File ID: GL08350.TX0

Method Blank File ID:

Blank Spike File ID: GL08305.TX0 Matrix Spike File ID: GL08353.TX0

Matrix Spike Duplicate File ID: GL08354.TX0

\* = Values Outside QC Range. « = Data outside Method Specification limits.

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

 $% Recovery = {( <1> - <2> ) / <3> } x 100$ 

LCS % Recovery = (<1> / <3> ) x 100

Relative Percent Difference =  $\{(<4> <5> | / \{(<4> + <5> ) x 0.5] x 100\}$ 

(\*\*) = Source:

(\*\*\*) = Source:

SAMPLES IN BATCH (SPL ID):

9912399-12A 9912535-01A 9912535-02A 9912535-03A 9912535-04A 9912385-11A 9912385-12A 9912399-01A

9912399-02A





#### SPL Blank QC Report

page

Matrix: Soil

Sample ID: MBLK

Batch: X991207204301

Reported on: 12/21/99 12:00 Analyzed on: 12/07/99 11:20 Analyst: YTS

### Method 8260 - X341B01

		· · · · · · · · · · · · · · · · · · ·	
Compound	Result	Detection Limit	Units
Chloromethane	ND	5	ug/Kg
Vinyl Chloride	ND	5	ug/Kg
Bromomethane	ND	5	ug/Kg
Chloroethane	ND	5	ug/Kg
Trichlorofluoromethane	ND	5	ug/Kg
Acetone	ND	100	ug/Kg
1,1-Dichloroethene	ND:	5	ug/Kg
Methylene Chloride	ND	5	ug/Kg
1,2-Dichloroethene (total)	ND	5	ug/Kg
Carbon Disulfide	ND	5	ug/Kg
trans-1,2-Dichloroethene	ND	5 5	ug/Kg
1,1-Dichloroethane	ND		ug/Kg
Vinyl Acetate	ND	5	ug/Kg
2-Butanone	ND	10	ug/Kg
cis-1,2-Dichloroethene	ND	5	ug/Kg
Chloroform	ND	5	ug/Kg
1,1,1-Trichloroethane	ND	5	ug/Kg
1,2-Dichloroethane	ND	5	ug/Kg
Benzene	ND	5	ug/Kg
Carbon Tetrachloride	ND	5	ug/Kg
1,2-Dichloropropane	ND	5	ug/Kg
Trichloroethene	ND	5	ug/Kg
Bromodichloromethane	ND	5	ug/Kg
4-Methyl-2-Pentanone	ND	5	ug/Kg ug/Kg
cis-1,3-Dichloropropene	ND	ا ت	ug/Kg
trans-1,3-Dichloropropene	ND ND	5	ug/Kg
Toluene	ND ND	5 5 5 5	ug/Kg
1,1,2-Trichloroethane	ND	5	ug/Kg
2-Hexanone	ND ND	5	ug/Kg
Dibromochloromethane	ND	5	ug/Kg
Tetrachloroethene	ND	5	ug/Kg
Chlorobenzene	ND:	5	ug/Kg
Xylene (Total)	ND		ug/Kg
Ethylbenzene	I ND	ا ا	( ~3/ • (3)

ND - Not detected.





\*\* SPL QUALITY CONTROL REPORT \*\*

Matrix: Soil

Reported on:

12/09/99

Analyzed on:

12/08/99

Analyst:

AΗ

This sample was randomly selected for use in the SPL quality control program. The results are as follows:

Total Solids EPA CLP Inorganic SOW-ILM03

-- DUPLICATE ANALYSIS --

SPL Sample ID	Original Sample Concentration wt %	Duplicate Sample wt %	RPD	RPD Max.
9912456-03C	80.5	81.2	0.9	20

TSOL991282000000-9912413

Samples in batch:

9912399-07B 9912399-11B 9912399-08B 9912456-03C 9912399-09B

9912399-10B





#### SPL QUALITY CONTROL REPORT \*\*

Solid Matrix:

Reported on: 12/09/99 Analyzed on: 12/09/99

Analyst: CJ

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

> Mercury, Total Method 7471A \*\*\*

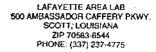
SPL Sample ID Number	Blank Value mg/Kg	Certified Value mg/Kg	Measured Concentration mg/Kg	Mandatory Range of Measured Concentration
LCS	ND	2.17	2.51	1.48 - 2.86

FIAS991209110000-9912451

#### Samples in batch:

9912399-10B 9912399-09B 9912399-08B 9912399-07B

9912399-11B 9912424-01B 9912456-03A





## \*\* SPL QUALITY CONTROL REPORT \*\*

Matrix: Soil

Reported on: 12/13/99 Analyzed on: 12/13/99

Analyst: JB

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Lead, Total Method 7420 \*\*\*

SPL Sample ID Number	Blank Value mg/Kg		Measured Concentration mg/Kg	Mandatory Range of Measured Concentration
LCS	ND	56.6	52	43.1 - 70.1

3100991213120000-9912551

#### Samples in batch:

9912399-07B 9912399-08B 9912399-09B 9912399-10B 9912399-11B 9912424-01B 9912456-03A





## \* SPL QUALITY CONTROL REPORT \*\*

Matrix: Soil

Reported on: 12/10/99 Analyzed on: 12/09/99

Analyst:

EG

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Diesel Range Organics Method Modified 8015B\*\*\* for Diesel

SPL Sample ID Number	Blank Value mg/Kg	LCS Concentration mg/Kg	Measured Concentration mg/Kg	% Recovery	QC Limits Recovery
LCS	ND	100	72	72.0	47 - 129

991209114000

-9912499

#### Samples in batch:

9912399-01B	9912399-02B	9912399-03B	9912399-04B
9912399-05B	9912399-06B	9912399-07B	9912399-08B
9912399-09B	9912399-10B	9912399-11B	9912399-12B
JJ12JJJ VJ4	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		

Method of sample delivery to SPL and airbill number where applicable (circle one)?

Fed-X UPS Other:

Method of sample disposal: (circle one)

SPL Disposal HOLD

Return to Client

Receiving Technician signature:

Date/Time:

9912744 Fed EX# 103310677 SPL Laboratories Inc. Page Analysis Request and ☐ 8880 Interchange Drive ☐ 500 Ambassador Caffery Pkwy ☐ 459 Hughes Drive Houston, Texas 77054 Scott, Louisiana 70583 Traverse City, MI 49 143 Mallard, Suite B Chain of Custody Record Traverse City, MI 49684 St. Rose, Louisiana 70087 Temp: Store: (713) 660-0901 (318) 237-4775 (616) 947-5777 (504) 487-5503 Fax: (713) 660-8975 Fax: (318) 237-7080 Fax: (616) 947-7455 Fax: (504) 468-3672 · (Lab Use Only) Project Physical Address Consultant Project No. Project City and State Williston, VT 490208 521 Shunpike Rd Field Date Sample Sample Type ANALYSIS REQUESTED Grab Preser-Sample No./ Container (Liquid, Soil and REMARKS vative Identification Time (No. & Size) Sludge, Etc.) TEST METHOD 11/30/99 PODOB, GRO/DRO VOCS /TOH Joul 80215B 801556 7:00 11/3499 Sail 8015SD 11/30/49 ٠... DRP6 11/30/99 1 al 2 2:30 11/30/99 Soil 18 3/3cT 2.40 11/30/99 Siel KMar 1:30 VCCG RCRABILITATE, 12/1/99 8860, 6010/7400, 8260S 155WB Sal 11:26 3000 GRO/DRA 17/1/98 Soi 2 44 / 1030 B 50-11 500 7554B Date: 12/1/47 Date: (2/(194 Samplers: (Signature) Relinquished by: Received by: (Signature) (Signature) Time: /1.20 Affiliation Relinguished by: Date: /2/2/49 Received for Laboratory: (Signature) (Signature) Time: //2/102 Time: /ሪ /ሪ REPORT TO: CONSULTANT'S NAME & ADDRESS; INVOICE TO: AYDER SYSTEM INC. Turn Around Time Goolasio Services Con A Rider Transmitted 1124 Hrs RYDER PROJECT CONTACT: Buck Buck □ 3 Days CONTACT: 13000 12000 ☐ HOUSTON TX □ MIAMI, FL. CONSULTANT'S PHONE #: 1978) 568 - 8146 D POMPANO BEACH, FL Se Marth Brusewick. □ 5 Days CONSULTANT'S FAX #: \_\_\_\_\_ @/ Standard PROJECT INFORMATION: SUBSIDIARY: REGION: REMARKS: DISTRICT ☐ RTR LOCATION CODE. 1178 ☐ RSTS

COL DOCUMENT CONTROL



LAFAYETTE AREA LAB 500 AMBASSADOR CAFFERY PKWY. SCOTT, LOUISIANA ZIP 70583-8544 PHONE: (337) 237-4775

## LABORATORY REPORT

SPL WORKORDER NUMBER: 0003136

Submitted to:

BRIAN MOORE
GEOLOGIC SERVICES CORPORATION
15 BONAZZOLI AVENUE
HUDSON MA 01749

Reported: 03/10/00

Prepared For: RYDER TRANSPORTATION SERVICES

Measurement Basis: This analysis was performed in accordance with EPA guidelines for analysis and quality control. Results are reported on a Wet Weight Basis unless otherwise noted and relate only to items tested.

Approved By:

ANNIE REEDY

Project Manager

Note: This report may not be reproduced, except in full, without written permission from SPL.



LAFAYETTE AREA LAB 500 AMBASSADOR CAFFERY PKWY. SCOTT, LOUISIANA ZIP 70583-8544 PHONE: (337) 237-4775

Date: Friday, March 10, 2000

## \*\*\*\*\*SUMMARY REPORT\*\*\*\*

Company: RYDER TRANSPORTATION SERVICES

Site:

WILLILSTON, VT (BURLINGTON)

Project No: 990208

Project: #1178, 520 SHUNPIKE AVE.

Workorder	Matrix	Client ID	Collected	Compound	Result	Det Limit	Method
0003136-06	WATER	SB-2/WS	2/24/2000	Benzene	ND	lμg/L	Method 8020A ***
				EthylBenzene	ND	lµg/L	Method 8020A ***
				MTBE	ND	8µg/L	Method 8020A ***
				Toluene	ND	lμg/L	Method 8020A ***
				Total Xylene	ND	lμg/L	Method 8020A ***
003136-07	WATER	SB-3/WS	2/24/2000	Benzene	ND	lµg/L	Method 8020A ***
				EthylBenzene	ND	lμg/L	Method 8020A ***
				MTBE	ND	8μg/L	Method 8020A ***
				Toluene	ND	lμg/L	Method 8020A ***
				Total Xylene	ND	lμg/L	Method 8020A ***

ND - Not Detected.

Notes:

\*Ref: Methods for chemical Analysis of Water and Wastes, 1983, EPA.

\*\*Ref: Standard Methods for Examination of Water and Wastewater, 18th ed.

\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd ed.



LAFAYETTE AREA LAB 500 AMBASSADOR CAFFERY PKWY, SCOTT, LOUISIANA ZIP 70583-8544 PHONE: (337) 237-4775

## Certificate of Analysis No. L1-0003136-01

RYDER TRANSPORTATION SERVICES 160 LAWRENCEVILLE-PENNINGTON LAWRENCEVILLE, NJ 8648

ATTN: CARRIE BUCK

PROJECT NO: 990208

MATRIX: SOIL

DATE SAMPLED: 02/24/00 10:50:00

DATE RECEIVED: 03/03/00

PROJECT: #1178, 520 SHUNPIKE AVE. SITE: WILLILSTON, VT (BURLINGTON)

SAMPLED BY: GES

SAMPLE ID: SB-1/6-8

ANALYTICAL DATA

PARAMETER RESULTS

DETECTION LIMIT UNITS

DATE: 03/10/00

Surrogate

o-Terphenyl

% Recovery

Method Modified 8015B\*\*\* for Diesel

Analyzed by: RJB

Date: 03/08/00 04:20:00

Sonication Extraction

Method 3550B \*\*\*
Analyzed by: DMB

Date: 03/06/00 13:00:00

3/6/00

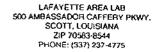
D - Diluted, limits not applicable.

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA

\*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.

\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

COMMENTS: Surrogate failure due to matrix interference.





#### Certificate of Analysis No. L1-0003136-02

RYDER TRANSPORTATION SERVICES 160 LAWRENCEVILLE-PENNINGTON LAWRENCEVILLE, NJ 8648

ATTN: CARRIE BUCK

DATE: 03/10/00

PROJECT: #1178, 520 SHUNPIKE AVE.

SITE: WILLILSTON, VT (BURLINGTON) SAMPLED BY: GES

SAMPLE ID: SB-2/6-8

PROJECT NO: 990208 MATRIX: SOIL

DATE SAMPLED: 02/24/00 12:01:00

DATE RECEIVED: 03/03/00

ANALYTICAL DATA

PARAMETER

RESULTS

3/6/00

DETECTION

LIMIT

UNITS

Sonication Extraction

Method 3550B \*\*\* Analyzed by: DMB

Date: 03/06/00 13:00:00

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA \*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.

\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.



LAFAYETTE AREA LAB 500 AMBASSADOR CAFFERY PKWY. SCOTT, LOUISIANA ZIP 70583-8544 PHONE: (337) 237-4775

### Certificate of Analysis No. L1-0003136-03

RYDER TRANSPORTATION SERVICES 160 LAWRENCEVILLE-PENNINGTON LAWRENCEVILLE, NJ

ATTN: CARRIE BUCK

DATE: 03/10/00

PROJECT: #1178, 520 SHUNPIKE AVE. SITE: WILLILSTON, VT (BURLINGTON)

PROJECT NO: 990208 MATRIX: SOIL

SAMPLED BY: GES

DATE SAMPLED: 02/24/00 12:58:00

SAMPLE ID: SB-3/6-8

DATE RECEIVED: 03/03/00

ANALYTICAL DATA

PARAMETER

RESULTS

DETECTION

UNITS

Sonication Extraction

3/6/00

LIMIT

Method 3550B \*\*\*

Analyzed by: DMB

Date: 03/06/00 13:00:00

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA \*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.

\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.



LAFAYETTE AREA LAB 500 AMBASSADOR CAFFERY PKWY. SCOTT, LOUISIANA ZIP 70583-8544 PHONE: (337) 237-4775

## Certificate of Analysis No. L1-0003136-04

RYDER TRANSPORTATION SERVICES 160 LAWRENCEVILLE-PENNINGTON LAWRENCEVILLE, NJ 8648

ATTN: CARRIE BUCK

PROJECT NO: 990208

MATRIX: SOIL

DATE SAMPLED: 02/24/00 15:07:00

DATE RECEIVED: 03/03/00

PROJECT: #1178, 520 SHUNPIKE AVE. SITE: WILLILSTON, VT (BURLINGTON)

SAMPLED BY: GES

PARAMETER

**SAMPLE ID:** SB-4/6-8

ANALYTICAL DATA

RESULTS

3/6/00

DETECTION

LIMIT

UNITS

DATE: 03/10/00

Sonication Extraction

Method 3550B \*\*\*
Analyzed by: DMB

Date: 03/06/00 13:00:00

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA

\*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.

\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.





## Certificate of Analysis No. L1-0003136-06

RYDER TRANSPORTATION SERVICES 160 LAWRENCEVILLE-PENNINGTON LAWRENCEVILLE, NJ 8648

ATTN: CARRIE BUCK

DATE: 03/10/00

PROJECT: #1178, 520 SHUNPIKE AVE. SITE: WILLILSTON, VT (BURLINGTON)

PROJECT NO: 990208
MATRIX: WATER

SAMPLED BY: GES

DATE SAMPLED: 02/24/00 13:15:00

SAMPLE ID: SB-2/WS

DATE RECEIVED: 03/03/00

ANALYTICAL	DATA		
PARAMETER	RESULTS	DETECTION	UNITS
		LIMIT	
MTBE	ND	8 P	μg/L
BENZENE	ND	1 P	
TOLUENE		<del>-</del>	$\mu$ g/L
ETHYLBENZENE	ND	1 P	$\mu { m g/L}$
	ND	1 P	$\mu { m g/L}$
TOTAL XYLENE	ND	1 P	μg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		μg/L
			ду/ Б
Surrogate	% Recovery		
1,4-Difluorobenzene			
	99		
4-Bromofluorobenzene	99		
Method 8020A ***			

ND - Not detected.

Analyzed by: WJB

Date: 03/04/00

(P) - Practical Quantitation Limit

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
\*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.



SPL BATCH QUALITY CONTROL REPORT \*\* Method 8020A \*\*\*

LAFAYETTE AREA LAB 500 AMBASSADOR CAFERY PKWY, SCOTT, LOUISIANA ZIP 70583-8544 PHONE: (337) 237-4775

Macrix: Units:

Soil μg/Kg

Batch Id: HPDD000303154600

#### LABORATORY CONTROL SAMPLE

SPIKE	Method	Spike	Blan	k Spike	OC Limits(**) (Mandatory) % Recovery Range		
COMPOUNDS	Blank Result	Added <3>	Result <1>	Recovery			
MIBE	ИD	50	46	92.0	70 - 130		
Benzene	ND	50	45	90.0			
Toluene	ND	50	44	88.0	1		
Ethyl Benzene	ND	50	43	86.0			
o-Xylene	ND	50	43	86.0			
m and p Xylene	ОМ	100	86	86.0	70 - 130 70 - 130		

#### MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results	Spike Added	Matrix	Spike	Matrix Dupli	Spike cate	MS/MSD Relative %		Limits(***) (Advisory)	
	<2>	<3>	Result <1>	Recovery	Result	Recovery	Difference		Recovery	Range
MTBE	ND.	50	39	76.0	38	74.0	2.67	20	70 -	130
BENZENE	ND	50	39	78.0	41	82.0	5.00	20	70 -	130
TOLUENE	N/D	50	38	76.0	40	80.0	5.13	20	70 -	130
ETHYL BENZENE	DΙ	50	37	74.0	39	78.0	5.26	20	70 -	130
O-XYLENE	ND	50	37	74.0	40	80.0	7.79	20	70 -	130
M AND P XYLENE	ND	100	72	72.0	77	77.0	6.71	20	70 -	130

Analyst: RB

Sequence Date: 03/03/00

SPL ID of sample spiked: 0003138-04A

Sample File ID: DC03526.TX0

Method Blank File ID:

Blank Spike File ID: DC03504.TX0

Matrix Spike File ID: DC03531.TX0

Matrix Spike Duplicate File ID: DC03532.TX0

\* = Values Outside QC Range. \* = Data outside Method Specification limits.

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery = {( <1> - <2> ) / <3> )  $\times$  100

LCS % Recovery = (<1> / <3> ) x 100

Relative Percent Difference = |(<4> - <5>)| / [(<4> + <5>)] x 0.5] x 100

(\*\*) = Source:

(\*\*\*) = Source: 8020 Table 3

SAMPLES IN BATCH (SPI, ID):

0003136-01A 0003136-02A 0003136-03A 0003136-04A

0003111-01A 0003111-02A 0003111-03A 0003111-04A

0003111-06A 0003111-07A



SPL BATCH QUALITY CONTROL REPORT \*\* Method 8020A \*\*\*

LAFAYETTE AREA LAB 500 AMBASSADOR CAFFERY PKWY. SCOTT, LOUISIANA ZIP 70583-8544 PHONE: (337) 237-4775

Matrix: Units:

Soil μg/Kg

Batch Id: HPDD000306120800

#### LABORATORY CONTROL SAMPLE

SPIKE	Method	Spike	Blank	Spike	QC Limits(**) (Mandatory) % Recovery Range		
COMPOUNDS	Blank Result <2>	Added <3>	Result	Recovery			
MIBE	ND	50	51	102	70 - 130		
Benzene	ND	50	50	100	70 - 130		
Toluene	ND	50	50	100	70 - 130		
Sthyl Benzene	ND	50	50	100	70 - 130		
o-Xylene	NID	50	50	100	70 - 130		
and p Xylene	ND	100	100	100	70 - 130		

#### MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results	Spike Added	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative %	QC Limits(***) (Advisory)		
	<2>	<3>	Result <l></l>	Recovery <4>	Result	Recovery	Difference	RPD Max.	Recovery	Range
мтве	ND	50	46	92.0	45	90.0	2.20	20	70 -	130
BENZENE	ND	50	47	94.0	49	98.0	4.17	20	70 -	130
TOLUENE	ND:	50	46	92.0	49	98.0	6.32	20	70 -	130
ETHYL BENZENE	ND	50	46	92.0	48	96.0	4.26	20	70 -	130
O-XYLENE	ND	50	46	92.0	48:	96.0	4.26	20	70 -	130
M AND P XYLENE	ND	100	92	92.0	97	97.0	5.29	20	70 -	130

Analyst: RB

Sequence Date: 03/06/00

SPL ID of sample spiked: 0003138-08A

Sample File ID: DC06121B.TX0

Method Blank File ID:

Blank Spike File ID: DC06113B.TX0 Matrix Spike File ID: DC06129B.TX0

Matrix Spike Duplicate File ID: DC06130B.TX0

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery = [(<1> - <2>) / <3>] x 100

LCS % Recovery = (<1> / <3>) x 100

Relative Percent Difference =  $\{(<4> - <5> ) / \{(<4> + <5> ) x 0.5] x 100$ 

(\*\*) = Source:

(\*\*\*) = Source: 8020 Table 3

SAMPLES IN BATCH (SPL ID):

0003136-01A



ŁAFAYETTE AREA LAB 500 AMBASSADOR CAFFERY PKWY. SCOTT, LOUISIANA ZIP 70583-8544 PHONE: (337) 237-4775

#### \*\* SPL QUALITY CONTROL REPORT \*\*

Matrix: Soil

Reported on: 03/07/00 Analyzed on: 03/07/00

Analyst:

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

> Diesel Range Organics Method Modified 8015B\*\*\* for Diesel

SPL Sample	  Method	;  Sample 	  Spike 	Matrix Spike		7	Matrix Spike Duplicate		ï	QC LIMITS (Advisory)	
ID Number	Blank	Result	Added	Result	Recovery	Result	Recovery	(%)	RPD Max	% REC	
0003219-01A	ND	11	100	81	70.0	84	73.0	4.2	30	23 -124	

0003070000

-0003258

Samples in batch:

0003136-01B 0003136-02B 0003136-03B 0003136-04B 0003144-01B 0003144-02B 0003144-03B 0003144-04B

0003219-01A 0003219-02A

## SPL/LE/SM-F1.06

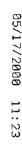
CAPAYETTE ARIEA CAB SOO AMBASSADOR CAFFERY PROVY. SCOTT, COUISIANA "ZIP 70583-8544 PHONE (318) 237-4775

## Sample Receipt Checklist

	Sample Receipt Checklist			()()
Client coologice Sevu.	COC Serial #:			<u> </u>
Project #:	Project Loc: Hugson My	Yes	No	NA
Are Custody seals on the shipping of	, , , , , , , , , , , , , , , , , , , ,	1,00	1.00	IVA
Chain-of-Custody (COC) present a	<del></del>		<del> </del>	
Traffic reports, airbills, or bills of la		<del>                                     </del>		
Are sample containers intact?	3 P		<del> </del>	
Are sample tags/field labels present	on each sample?		<del> </del>	
Are all samples present in the sample				-
Do date/time of sample collection as				
Do sample tags/field tags agree with				<del> </del>
Does sample type agree with COC?	-			<del>                                     </del>
· · · · · · · · · · · · · · · · · · ·	for each parameter agree with COC?		-	•
Does the bottle type and volume agr			1	†
Are the analyses requested listed on				
s the sample kit temperature 2 - 6 d	egrees C?	/	-	1.
Record the temperature in degrees C	in the NA column.			1
s the pH of all preserved samples ch	ecked and documented properly?			1.10
Are all samples preserved according	to EPA guidelines?		! <u></u> -	1
Are all samples within the EPA maxi	mum holding times?			
Oo sample containers conform to EP	A guidelines?	~		<del> </del>
oid the receiving technician record the	ne date/time of receipt and sign the COC?			1
Vas a nonconformance filled out f	or any items with a NO response?			
lethod of sample delivery to SPL an	d airbill number where applicable (circle on	ie)?		4
ed-X UPS Other:	812-65-4357797			
fethod of sample disposal:(circle on	SPL/Disposal HOLD	Retur	n to Clic	ent
ecciving Technician signature:		Daye/Ilm	- I	
		<u> </u>	D = I	00.0

JPL)	8880 Interciples Houston, Te (713) 660-09 Fax: (713) 6	318 (318 (318		(61		49684 St. Rose, Loui (504) 487-550	Suite B siana 70087 3	Analysis Request and Chain of Custody Record Temp: Store:  (Lab Use Only)
Consultant Project No.	Project Physical Addr	'	L c# (1		Project City			
990208	Ryder 52	O Shunpike.	Ave (	Williston, UT	ww.	Misston UT	Burles	eyten)
Field Date Sample No./ and 5 Identification Time C	a Sample Container O (No. & Size)	Sample Type (Liquid, Soil Sludge, Etc.)	Preser- vative	TEST	,	REQUESTED METHOD		REMARKS
SB-1/6-8 2/24/00 2	2 5ars	Soil		VO(5 (STEX+MTRE)	TPH	8020B/GR	o/DRO	TPH on Soilonly
SB-2/6-8 2/24/00 X	2 Jais	يكوزر				BTZXS6	801554	Suiss D. pape
5B-3/6-8 2/24/00 >	2 Jars	Jaic				BTXW6.		
58.4/6-8 2/24/OU >	23415	Soil					y - 1 3 · · · · · ·	3/10/00
SB-1/WS 12:15 >	3 Voa	Liwid	Hel					2/13/69
SB-2/Ws 2/24/00 >	3 Von	(iguid	14. (				•	
58-3/WS 2/24/00 /	2009	614010	١/١ (		··· · · · · · · · · · · · · · · · · ·			<u></u>
Sb4/ws 2/24/60		Liquid						
		,						
Samplers: (Signature)  Affiliation	Relinquished by: (Signature)	O Alla		Date: 2/24/00 Time: 9/00 pm	Received by: (Signature)	150D /	/ Date: 2/	ton
Geologia Services · E REPORT TO: CONSULTANT	Relinquished by: (Signature)	· · ·	····	Date: Time:	Received for (Signature)	1/1/20	Date 3/2	3/00 Intact
Briga Moole 15 Boardeal! Are	Judson MA			Turn Around Time ☐ 24 Hrs		Proper Systi	EM, INC. Carsport	lation Services
CONTACT: Bricia	Moore			☐ 3 Days	RYDER PE	ROJECT CONTACT:	<u>ریم کے</u> Housto	rrie Anne Buck
CONSULTANT'S PHONE #: CONSULTANT'S FAX #:			·	☐ 5 Days		PANO BEACH, FL	X 1 course	nleville, NJ
REMARKS:		Libert		Standard	SUBSIDIA	INFORMATION: RY: F CX RTS C	IEGION:	Niotkeist

APPENDIX E



## **Acknowledgment of Treatment** and Recycling

Environmental Soil Management, Inc. hereby acknowledges

Thermal Treatment and Recycling

of 13.41 tons of

Virgin Petroleum Contaminated Soil

from the Ryder Transportation, Williston, VT project

April 7, 2000

Environmental Soil Management, Inc.

New Hampshire DES Permit DES-SW-SP-96-002 Loudon, New Hampshire

Certificate Number 1293

# VT AGENCY OF NATURAL RESOURCES - DEPARTMENT OF ENVIRONMENTAL CONSERVATION WASTE MANAGEMENT DIVISION

OFF-SITE SOIL TREATMENT REQUEST FORM

	Off-Site	Location	1	Generator/Owner of Soil
Soil Off	Volume/Peak PID Site Street Addres	s: ESMI	D: 10 vd/344ppmv/40-80 of New Hampshire	Name: Ryder Transportation Services Facility ID#, Name, and Street Address: UST ID#1699 520 Shunpike Rd. Williston VT
Nar	ie of Kara Owner	Contac	ndon, NH et: Mike/Michelle	Contact: Ms. Carrie Anne Buck! Phone #: (732) 297-8733
Pho	ne# octomik@wn	r(60	3) 783-0228	Phone #: (732) & 3
			Off-Site Soil Treatment	
□	N/A There are no	edrock d	rinking water supplies within 20	00 feet of the treatment location.
۵	N/A There are no sl	hallow wa	ater supplies (e.g. dug wells, driv ttended if shallow water supplie	ren wells, etc.) within 300 feet of the treatment location. This is are shown to be hydraulically downgradient.
۵	N/A There are no s Source Protect	ensitive e	nvironments (i.e., stream, river, a, Class I or II groundwater zon	lake, pond, wildlife refuge, wetland, floodplain, Public Water e, or similar areas), within 100 feet of the treatment location.
□	N/A There is adeq	uate roon	n to allow for treatment to occur	over the necessary time frame.
☒	Public access	to the tr	eatment area has been restricted	(e.g. fencing, posted).
X	The treatment	t location	is not in a residential area.	
- Ц				the soil generator, has been obtained before treatment begins or granting Department of Environmental Conservation (DEC) tring soil treatment at any reasonable time.
. 🗖	N/A The local mun generator ha If applicable	nicipality is provid local pe	has been notified in writing of the ed evidence to the Waste Manas rmits should be obtained.	off-site location prior to initiating any soil treatment. The soil gement Division (WMD) that this notification has been made.
	N/A An area man	of the so	il location has been submitted t	o the WMD.
(X	The WMD	hac oive	n approval to move soils to the	off-site location specified above, as indicated by the WMD
	representativ	e, e signa	ture below.	
A Su	s the party responsi behapter 6 of the	ible for o Vermont on this i	ompliance with the "Agency Gu Underground Storage Tank Re- form are to the best of my know	idelines for Petroleum Contaminated Soil and Debris," gulations," and applicable statutes, I hereby certify that the edge true and correct.
	للم العامالية الأرام	na Budi		Environmental Project Engineer
N	ame of Owner/Ope	rator Ke	presentative (princeu)	Company Title
- -	Carrie a	nne.	Duck	Date
	gnature	-		the design of the state of the
	s land owner of the the above reference specting soil treat			proval to the soil generator to treat the soil volume cited above property access to DEC investigators for the purpose of
			<del>-,</del>	
Š	Not Applicablignature of Land C	)wner		Date
-	11	7	/	1/2/00
3	ignature of WMD	Represen	mative	Date of Approval

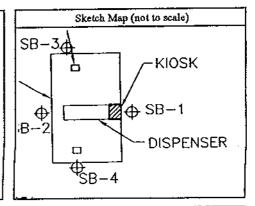
APPENDIX F

DRILLING LOG SB-1

Hydrogeologists and Environmental Scientists

15 Bonazzoli Avenue, Hudson, MA 01749 (978)-568-8740

Project:	Ryder Williston	Client	Ryder Trans. Serv.
Location:	520 Shunpike Road	Total Depth:	15 feet
Boring ID:	SB-1	Screen Diameter:	NA
Water Level:	~10 feet	Slot Size:	NA
Screen Length:	NA	Casing Diameter:	NA
Туре:	NA	Туре:	NA
Casing Length:	NA	Driller:	Derek W.
Top Elevation:	NA	Drilling Company:	ADT
Method	Hollow Stem Auger	GSC Inspector:	Dave Cella
Date Start:	2/24/00	Date End:	2/24/00
Notes: Testing c	onsists of PID headspace respo	nse (ppmv)	



			<del></del>	<del></del> ;	Sample		-	
Depth (feet)	Well Construction	Key	ID	Depth	Blows/6"	Pen/Rec	Sample Description	vmqq
o			SS-1	0-1	NA	NA	Brown, dry, FILL (sand and gravel)	<0.1
			SS-2	1-2	NA	АИ	Brown, dry, fine SAND	<0.1
2	N 0		SS-2	2-4	NA	NА	Brown-dark brown, dry, fine SAND, some sill, trace gravel	<0.1
4	W e I I		SS-3	4-6	7-10-10-10	24/5	Brown-gray, dry, SILT, some fine sand	<0.1
6	S e 1		SS-4	6-8	12-15-17-18	24/10	Brown-gray, damp, SILT, some fine send	<0.1
8			SS-5	\$-10	6-6-10-11	24/10	Gray, damp, SILT, trace clay	<0.1
10	<u>=</u>		\$\$-6	10-12	10-12-16-27	24/10	Brown-gray, wet, SILT	<0.1
12			SS-7	12-14	4-3-1-1	24/6	Gray, wet, SILT	<0.1
14					 		Bnd of exploration @ 15 feet	<u> </u>
16							Bito of exhibitation (@ 15 feet	
18								
20				<u> </u>				

GSC Project Number:

990208

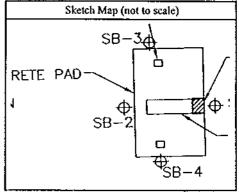
Checked By: X

## DRILLING LOG SB-2

Hydrogeologists and Environmental Scientists

15 Bonazzoli Avenue, Hudson, MA 01749 (978)-568-8740

Project:	Ryder Williston	Client:	Ryder Trans. Serv.	
Location:	520 Shunpike Road	Total Depth:	15 feet	
Boring ID:	SB-2	Screen Diameter:	NA	
Water Level:	~10 feet	Slot Size:	NA	
Screen Length:	NA	Casing Diameter:	NA	
Туре:	NA	Type:	NA	
Casing Length:	NA	Driller:	Derek W.	
Top Elevation:	NA	Drilling Company:	ADT	
Method	Hollow Stem Auger	GSC Inspector:	Dave Cella	
Date Start:	2/24/00	Date End:	2/24/00	
Notes: Testing c	onsists of PID headspace resp	onse (ppmv)		



<u></u>	···		Sample					
Depth (feet)	Well Construction	Key	ID	Depth		Pen/Rec	Sample Description	vmqq
								]
0			SS-1	0-2	NA	NA	Brown, dry, FILL (sand and gravel	<0.1
2	N 0 W		SS-2	2-4	NA	NA	Brown-tan, dry, fine to medium SAND, some fine gravel	<0,1
6	e 		SS-3	4-6	11-11-12-15	24/14	Tan-brown, dry, SILT, trace clay	<0.1
8	S e t		SS-4	6-8	S-12-11-17	24/6	Gray-tan, damp to wet, SILT, trace clay	1.0>
10	<b>V</b>		SS-5	8-10	4-5-6-11	24/16	Brown, wet, SILT, little clay, trace fine sand	<0.1
12			SS-6	10-12	6-7-9-10	24/16	Brown, wet, SILT, some clay	<0.1
' <b>'</b>			SS-7	12-14	5-8-7-6	24/8	Brown-gray, wet, SILT, little fine sand	<0.1
14			SS-8	14-15	NA	NA	Brown-gray, wet, SILT, little fine sand	<0.1
16							End of exploration @ 15 feet	
18								
20								

GSC Project Number:

990208

Checked By:

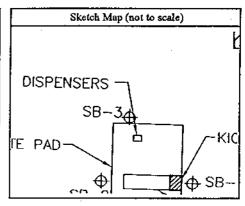
## DRILLING LOG

SB-3

Hydrogeologists and Environmental Scientists

15 Bonazzoli Avenue, Hudson, MA 01749 (978)-568-8740

Project:	Ryder Williston	Client:	Ryder Trans. Serv.
Location:	520 Shunpike Road	Total Depth;	15 feet
Boring ID:	SB-3	Screen Diameter:	NA
Water Level:	~10 feet	Slot Size;	NA
Screen Length:	NA	Casing Diameter:	NA
Туре:	NA	Туре:	NA
Casing Length:	NA	Driller:	Derek W.
Top Elevation:	NA	Drilling Company:	ADT
Method	Hollow Stem Auger	GSC Inspector:	Dave Celia
Date Start:	2/24/00	Date End:	2/24/00
Notes: Testing c	onsists of PID headspace resp	onse (ppmv)	



		1	Sample					
Depth (feet)	Well Construction	Key	ID	Depth	Blows/6"	Pen/Rec	Sample Description	vmqq
				ļ				
0			SS-1	0.5-2	NA	NA	6 inches Asphalt  Brown, dry, FILL (sand and gravel)	<0.1
2	N 0		\$S-2	2-4	NA	NA	Tan, dry, FILL (sand and gravel)	
4	W c I		SS-3	4-6	4-7-4-8	24/8	Brown, damp, SILT, little fine sand	<0.1
6	5 e		SS-4	6-8	5-6-4-7	24/12	Light brown, damp, SET, trace fine sand	<0.1
8	•		SS-5	<b>8</b> -10	7-9-9-7	24/10	Brown-gray, wet, SILT, some clay	<0.1
10	<b>▼</b>		SS-6	10-12	14-16-17-10	24/22	Brown, wet, SILT, little clay	<0.1
12	:		SS-7	12-14	12-10-18-8	24/12	Brown, wet, SILT, little clay	<0.1
14	;		SS-8	14-15	NA	NA	Brown-gray, wet, SILT, little fine sand, trace clay	<0.1
16							End of exploration @ 15 feet	
18				Ì			·	
20						Ì		

GSC Project Number:

990208

Checked By: DC

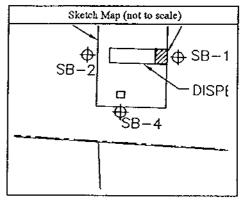
## DRILLING LOG

SB-4

## Hydrogeologists and Environmental Scientists

## 15 Bonazzoli Avenue, Hudson, MA 01749 (978)-568-8740

Project:	Ryder Williston	Client:	Ryder Trans. Serv.	
Location:	520 Shunpike Road	Total Depth:	15 feet	
Boring ID:	SB-4	Screen Diameter:	NA	
Water Level:	~10 feet	Slot Size:	NA	
Screen Length:	NA	Casing Diameter:	NA NA	
Туре:	NA	Туре:		
Casing Length:	NA	Driller:	Derek W.	
Top Elevation:	NA	Drilling Company:	ADT	
Method Hollow Stem Auger		GSC Inspector:	Dave Cella	
Date Start:	2/24/00	Date End:	2/24/00	
Notes: Testing c	onsists of PID headspace re	sponse (ppmv)		



		[ <del></del>	Sample					7
Depth (feet)	Well Construction	Key	ID	Depth	Blows/6"	Pen/Rec	Sample Description	vmqq
°							6 inches Asphalt	{
1 1			SS-1	0.5-2	NA	NA	Brown, dry, FILL	<0.1
2								
	Ņ o	,	SS-2	2-4	NА	NA	Brown-tan, dry, line SAND and GRAVEL	<0,1
4	w							
6	į į		SS- <b>3</b>	4-6	9-10-6-7	24/10	Brown, dry, SILT, some fine to medium gravel	<0.1
—°	s				1			
	e t		SS-4	6-8	9-8-8-9	24/18	Brown, damp to wet, SILT, trace clay	<0.1
8	-				]			
			\$S-5	8-10	5-7-10-11	24/12	Borwn-gray, wet, SILT, little clay	<0.1
10	▼							
	<del></del>		SS-6	10-12	6-8-8-10	24/0	No Recovery	_
1 ., 1								
12				1				
			SS-7	12-14	3-6-9-8	24/12	Dark brown, wet, SILT, some fine sand	<0.1
14			SS-8		b.T.A.	.,,	Dalah ana ang Olf Marana Cara	-0.
	-		22-8	14-15	NA	AM	Dark brown, wet, SILT, some fine sand  End of exploration @ 15 feet	<0.1
16	ł							
	Í		J				•	
18						-		
						-		
20								

GSC Project Number:

990208

Checked By: